



Northern Inyo County Local Hospital District

***Board of Directors Regular Meeting***

**Wednesday May 16 2012; 5:30pm**

*Board Room*

*Birch Street Annex*

*2957 Birch Street, Bishop, CA*

# **DRAFT AGENDA**

## NORTHERN INYO COUNTY LOCAL HOSPITAL DISTRICT BOARD OF DIRECTORS MEETING

May 16, 2012 at 5:30 P.M.

*In the Northern Inyo Hospital Board Room at 2957 Birch Street, Bishop CA*

1. Call to Order (at 5:30 P.M.).
  2. Opportunity for members of the public to comment on any items on this Agenda.
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### ***Consent Agenda***

3. Approval of minutes of the April 18, 2012 regular meeting and the April 23, 2012 special meeting (*action items*).
  4. Financial and Statistical Reports for the month of March 2012; John Halfen (*action item*):
    - *Cash balances fell along with accounts payable. There were no other significant changes to the Balance Sheet.*
    - *All sources of patient revenue are consistent with budget, although Year-To-Date gross is still significantly under budget.*
    - *There were no substantial prior period adjustments.*
    - *Salaries are running slightly ahead of budget due largely to the last McKesson push to "Go Live". Overall Expenses were \$210K under budget.*
    - *Monthly Operating Income was \$243K, \$89K over budget, with a Year-To-Date net income of \$2,159,000, or \$1,006,000 over budget*
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5. Administrator's Report; John Halfen.
  - A. Building Update
  - B. Orthopedic services update
  - C. Physician Recruiting Update
  - D. Security Report for March 2012
  - E. HIS Update
6. Chief of Staff Report; Robbin Cromer-Tyler, M.D..
  - A. Hospital wide Policy and Procedure approvals (*action items*):
    1. *Vapotherm*
    2. *Initial Ventilator Settings*
    3. *Circumcision*
    4. *Newborn Screening Test*
    5. *BiliChek Transcutaneous Bilirubin Testing*
    6. *Influenza Vaccination Policy*
    7. *Employee Tuberculosis Surveillance*
    8. *Bloodborne Pathogens*
  - B. Reports (*approval items*):
    1. *Pharmacy and Therapeutics Committee Adverse Drug Event Report, Year End 2011*
    2. *Medication Error Reduction Program, Annual Report for 2011*

3. *Pharmaceutical Care Report for 2011*

C. Medical Staff Appointments (*action items*):

1. Appointment to the NIH Provisional Medical Staff, with privileges as requested, of the following:

A. Board-certified cardiologists Theodore Berndt, M.D.; Thomas DaVee, M.D.; Richard Seher, M.D.; and Robert Swackhamer, M.D.; affiliated with Renown Medical Center, with telemedicine privileges as requested to remotely read echocardiograms;

B. Board-certified internist and hospitalist Sudhir Kakarla, M.D., with privileges as requested.

C. Board-certified radiologist Natalia Zarzhevsky, M.D., with privileges as requested.

7. Old Business

- None

8. New Business

A. Ratification of Construction Change Orders approved within the \$100,000 allowance (*action items*):

1. COR 307; IB 359, Power for HW Alarm and RFI 1366, 4,102.83

2. COR 308; Horizontal PDU for IT Room, per NIH request, \$5,344.22

3. COR 309; IB 340, FED Change for Code Clearance, \$7,447.27

4. COR 310; IB 342, Ice Maker Anchorage, \$4,654.66

5. COR 311; IB 354, Ambulance Entrance Door Control, \$4,804.90

6. COR 312; RFI 1236, Casework and Mech-Shades Conflict in MedSurg and ICU, \$905.48

7. COR 313; RFI 1347.1, Ice maker in Casework H2101, \$862.72

8. COR 314; IB 351, Cable Tray and Kitchen Equipment, \$601.92

B. Approval of 2012-2013 Budget Calendar (*action item*).

C. Ultrasound purchase for the Rural Health Clinic (*action item*).

D. Earthquake Insurance Policy Approval (*action item*).

9. Reports from Board members on items of interest.

10. Opportunity for members of the public to comment on any items on this Agenda, and/or on any items of interest.

11. Adjournment to closed session to:

A. Hear reports on the hospital quality assurance activities, and hear a report from the Medical Staff Executive Committee (Section 32155 of the Health and Safety Code, and Government

- Code Section 54962).
- B. Confer with legal counsel regarding pending litigation based on stop notice filed by Strocal, Inc. (Government Code Sections 910 et seq., 54956.9).
  - C. Discussion to determine whether or not to initiate litigation (Government Code Section 54956.9(c)).
  - D. Confer with legal counsel regarding potential litigation (Government Code Section 54956.9(c)).
- 12. Return to open session, and report of any action taken in closed session.
  - 13. Opportunity for members of the public to address the Board of Directors on items of interest.
  - 14. Adjournment.

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- CALL TO ORDER                      The meeting was called to order at 5:35 pm by Peter Watercott, President.
- PRESENT                                Peter Watercott, President  
    John Ungersma, M.D., Vice President  
    M.C. Hubbard, Secretary  
    Denise Hayden, Treasurer  
    D. Scott Clark, M.D., Director
- ALSO PRESENT                        John Halfen, Administrator  
    Robbin Cromer-Tyler, M.D., Chief of Staff  
    Douglas Buchanan District Legal Counsel  
    Sandy Blumberg, Administration Secretary
- ALSO PRESENT FOR  
RELEVANT PORTION(S)                Dianne Shirley, R.N., Performance Improvement Coordinator
- OPPORTUNITY FOR  
PUBLIC COMMENT                      Mr. Watercott asked if any members of the public wished to comment on any items listed on the agenda for this meeting, or on any items of interest. Local artist Dwayne Daniels was present to offer a donation of his artwork to Northern Inyo Hospital (NIH) to be displayed in the new hospital building in memory of his wife Delores A. Daniels. Mr. Daniels asks that the artwork be located in a place of dignity, and also asks that plaques be mounted indicating that the pieces were donated on his wife's behalf. The Board thanked Mr. Daniels for his generous donation and expressed their condolences in the loss of his wife. No other comments were heard.
- CONSENT AGENDA  
(APPROVAL OF  
MINUTES AND  
FINANCIALS)                            The proposed consent agenda for this meeting included the following items:
1. Approval of minutes of the March 21, 2012 regular meeting  
(*action item*)
  2. Approval of minutes of the April 2, 2012 special meeting (*action item*)
  3. Financial and Statistical Reports for the month of February 2012  
(*action item*):
    - No significant changes on the Balance Sheet
    - All sources of patient revenue were down, primarily inpatient and ancillary, due to lower surgery volumes
    - Substantial (800K) prior period adjustment due to MediCal Cost Report settlement left us 664K over budget in Total Net Revenue
    - Supplies were over budget, and overall expenses were under budget
    - Operating income was over budget for the month, and for year-to-date
    - Year-to-date net revenue totals \$2,016,000

ADMINISTRATOR'S  
REPORT

It was moved by Denise Hayden, seconded by John Ungersma, M.D., and passed to approve all three consent agenda items as presented.

BUILDING UPDATE

Mr. Halfen reported the Office of Statewide Healthcare Planning and Development (OSHPD) has completed some of the inspections for the new hospital building and will return tomorrow (April 19th) to finish. Among other things, the fire alarm system will be tested tomorrow, and the hospital will conduct a full power shut down as part of OSHPD's test. It is hoped that we will be granted a certificate of occupancy tomorrow, and after that the licensing process will begin. It is expected that the licensing process will take 30 to 60 days.

ORTHOPEDIC AND  
PHYSICIAN  
RECRUITING UPDATE

Mr. Halfen reported potential orthopedic surgeon Russell Donnelly M.D. will visit NIH next week, and we continue to actively recruit for a new orthopedic surgeon. Lyn Leventis M.D. will join the OB/Gyn practice of Lara Jeanine Arndal M.D. on April 30, and Kristin Collins, D.O. is scheduled to come on board this summer. Administration continues to recruit for internal medicine physicians, and for at least one more hospitalist.

SECURITY

Mr. Halfen also called attention to the Security report for February 2012, which revealed no security issues of significance.

DEBT SERVICE  
ANALYSIS

Mr. Halfen stated in light of the fact that the hospital has recently taken on debt in order to get through the remainder of the hospital rebuild project and to help fund the purchase and implementation of NIH's new Hospital Information System (HIS), he has done a Debt Service Analysis which reveals that we can still acquire additional debt and stay within the parameters of an "A" rated company. Mr. Halfen also gave a heads-up that we will need to decide in the relatively near future whether or not we intend to proceed with Phase III of the hospital rebuild project. We will look at that possibility more seriously after we have moved into the new hospital building.

Mr. Halfen also noted he will call a special meeting of the District Board next Monday, April 23 for the purpose of approving a corporate resolution to defease the 1998 Revenue Bonds.

RELATIONS WITH  
MAMMOTH HOSPITAL

Mr. Halfen reported he recently met with Mammoth Hospital Administrator Gary Boyd in order to open a dialog on the possibility of Mammoth Hospital and NIH coordinating more services for the benefit of both facilities and for the benefit of area residents. The Administrators will continue to meet for further discussions on this topic. It was noted

that the possibility of combining Pathology services and Laundry services was discussed at this meeting.

- OPENING CEREMONIES DATES** Dates for opening ceremonies for the new hospital building have tentatively been scheduled as follows: Dignitary and media ceremony (invitation only) June 29<sup>th</sup>; General public opening, flag raising, and blessing by clergy Sunday July 1<sup>st</sup>; Appreciation Dinner for Turner Construction personnel Thursday June 28<sup>th</sup>. A celebratory employee breakfast is also being planned and the date for that event has yet to be determined. Additional details on all of these events will follow, as the time of the opening draws nearer.
- NEWBORN SCREENING TOOL** Mr. Halfen called attention to a site visit report from Children's Hospital of Central California, which reveals that NIH's newborn screening process is 100% compliant in every category. Mr. Halfen praised hospital staff for their efforts in this area.
- CHIEF OF STAFF REPORT** Chief of Staff Robbin Cromer-Tyler, M.D. reported the Medical Staff office is developing a new physician orientation process, and Dr. Lynne Leventis will be oriented by Clinics Manager Lisa Harmon and Medical Staff Coordinator Maggie Egan upon her arrival on April 30<sup>th</sup>.
- OLD BUSINESS**
- DIRECTOR OF HOSPITALIST SERVICES AGREEMENT WITH ASAO KAMEI** Mr. Halfen called attention to a proposed Director of Hospitalist Services Agreement with Asao Kamei, M.D.. The agreement is similar to the one previously approved by the Board with only minor changes and compensation adjustments being made. Following review of the agreement provided it was moved by M.C. Hubbard, seconded by Ms. Hayden, and passed to approve the revised agreement for Director of Hospitalist Services with Asao Kamei, M.D. as presented.
- PHYSICIAN DOCUMENTATION MODULE** Mr. Halfen also informed the Board that the Medical Staff has approved the purchase of the Physician Documentation module previously approved for purchase by the District Board pending the Medical Staff's acceptance. NIH Physicians are currently being trained on use of the software which will be an integral part of the hospital's new HIS system.
- NEW BUSINESS**
- HOLMAN CAPITAL AGREEMENT** Mr. Halfen called attention to a proposed agreement with Holman Capital to establish a \$5,000,000 line of credit for the Hospital District. Holman is the broker for the deal, and Alliance Bank will be the actual source of funding if needed. The overall interest rate for this line of credit is approximately 4.5 percent, which is as good as can be expected considering current economic conditions. Mr. Buchanan noted the agreement should be amended to state that adjudication of any claims that may arise should be handled in Independence, California, rather than in Arizona. It was noted that the hospital's accounts receivable will be held as collateral for any credit that is extended. Following brief discussion it was moved by Ms. Hayden, seconded by Doctor Ungersma, and passed to



approve the agreement with Holman Capital to establish a \$5,000,000 line of credit for the Hospital District as requested.

VISITOR MEAL PRICES

Mr. Halfen stated that the agenda item regarding a possible change to visitor meal prices will not be discussed at this time.

AGREEMENT FOR  
ASSOCIATE DIRECTOR  
OF HOSPITALISTS

Mr. Halfen called attention to a proposed agreement for Associate Director of the Hospitalist Program with Nickoline Hathaway, M.D.. The agreement allows for Doctor Hathaway to provide backup for Hospitalist Director Asao Kamei, M.D. when necessary. Following review of the agreement provided it was moved by Doctor Ungersma, seconded by Ms, Hubbard, and passed to approve the Agreement for Associate Director of Hospitalists with Nickoline Hathaway M.D. as requested.

PRACTICE  
MANAGEMENT  
AGREEMENT, LARA  
JEANINE ARNDAL M.D.

Mr. Halfen also called attention to a proposed Practice Management Agreement with Lara Jeanine Arndal, M.D., noting that it is nearly identical to the agreement previously approved for incoming OB/Gyn Lyn Leventis M.D.. As senior partner in the Arndal/Leventis practice, Dr. Arndal will receive slightly higher compensation than Dr. Leventis, as she will be compensated for assuming some of the management responsibilities of the practice. It was also noted that Dr. Arndal's compensation has been calculated at 54% of the industry standard. Following review of the information provided it was moved by Ms. Hayden, seconded by Doctor Ungersma, and passed to approve the Practice Management Agreement with Lara Jeanine Arndal, M.D. as presented.

AMENDMENT TO  
PATHOLOGY  
AGREEMENT

Mr. Halfen also called attention to a proposed amendment to the existing Pathology and Clinical Laboratory Service Agreement with Kenneth Saeger, M.D.. The proposed amendment expands and clarifies the termination clause on Doctor Saegar's existing agreement, and it is being proposed in order to ensure that pathology coverage changes requested by Administration and by the Medical Executive Committee are met by Dr. Saeger in a timely manner, and to ensure that Pathology service coverage remains uninterrupted. Following brief discussion it was moved by Doctor Ungersma, seconded by Ms. Hubbard, and passed to approve the proposed Amendment to the Pathology and Clinical Laboratory Service Agreement with Kenneth Saeger, M.D. as presented.

BOARD MEMBER  
REPORTS

Mr. Watercott asked if any members of the District Board wished to report on any items of interest. Doctor Ungersma reported he recently attended the Association of California Healthcare Districts (ACHD) Legislative Day in Sacramento, and once again it was a very valuable experience. Doctor Ungersma presented information on the sources of income included in the State of California's upcoming budget, and explained where cuts to expenditures are expected to be made. Those cuts include cuts to Health and Human Services programs including cuts that

will be made to California Hospitals and to hospital reimbursement rates. The upcoming budget year is likely to bring increased financial challenges for California hospitals. No other comments were heard.

OPPORTUNITY FOR  
PUBLIC COMMENT

In keeping with the Brown Act, Mr. Watercott again asked if any members of the public wished to comment on any items of interest. No comments were heard.

CLOSED SESSION

At 6:28 p.m. Mr. Watercott announced the meeting was being adjourned to closed session to allow the Board of Directors to:

- A. Hear reports on the hospital quality assurance activities, and hear a report from the Medical Staff Executive Committee (Section 32155 of the Health and Safety Code, and Government Code Section 54962).
- B. Confer with legal counsel regarding pending litigation based on stop notice filed by Strocal, Inc. (Government Code Sections 910 et seq., 54956.9).
- C. Discussion to determine whether or not to initiate litigation (Government Code Section 54956.9(c)).
- D. Confer with legal counsel regarding potential litigation (Government Code Section 54956.9(c)).

RETURN TO OPEN  
SESSION AND REPORT  
OF ACTION TAKEN

At 6:35 p.m. the meeting returned to open session. Mr. Watercott reported that the Board took no reportable action during closed session.

OPPORTUNITY FOR  
PUBLIC COMMENT

In keeping with the Brown Act, Mr. Watercott again asked if anyone present wished to comment on any items on the agenda for this meeting, or on any items of interest. No comments were heard.

ADJOURNMENT

The meeting was adjourned at 6:39 p.m..

\_\_\_\_\_  
Peter Watercott, President

Attest:

\_\_\_\_\_  
M.C. Hubbard, Secretary

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- CALL TO ORDER                      The meeting was called to order at 12:10 p.m. by John Ungersma, M.D., Vice President.
- PRESENT                                John Ungersma, M.D., Vice President  
Denise Hayden, Treasurer  
D. Scott Clark, M.D., Director
- ALSO PRESENT                      John Halfen, Administrator  
Doug Buchanan, District Legal Counsel  
Melanie Fields, Nursing Office Secretary
- ABSENT                                 Peter Watercott, President  
M.C. Hubbard, Secretary  
Robbin Cromer-Tyler, M.D., Chief of Staff
- OPPORTUNITY FOR  
PUBLIC COMMENT                      Doctor Ungersma asked if any members of the public wished to comment on any items listed on the Notice for this meeting or on any items of interest. No comments were heard.
- APPROVAL OF  
CORPORATE  
BORROWING  
RESOLUTION No. 12-01                Mr. Halfen called attention to Northern Inyo County Local Hospital District Resolution No. 12-01, titled "*Resolution Expressing Official Intent regarding Certain Capital Expenditures to be Reimbursed with Proceeds of Obligations*". The proposed resolution will allow issuance of new revenue bonds to finance the construction, renovation, remodeling, or equipping of capital projects in relation to the hospital rebuild project. With approval of this Resolution, the District will have the ability to defease the 1998 revenue bonds and reissue new bonds in order to help cover the remaining cost of the hospital rebuild project. The District reasonably expects to reimburse all or a portion of the expenditures with the proceeds of the bonds, pursuant to Treasury Regulations Section 1.150-2. Mr. Halfen noted the amount of expenses incurred is not expected to exceed \$6,000,000, and this resolution must be placed in effect not more than 60 days following the incurring of the specified expenses. Mr. Buchanan requested that section 5 of the Resolution be reworded to read "The appropriate officer of the District is hereby authorized and directed to take such action and to execute such documents as may be necessary or desirable to effectuate the intent of this resolution."  
  
Following brief discussion of the purpose for this Resolution, it was moved by D. Scott Clark, M.D., seconded by Denise Hayden, and unanimously passed to approve Resolution 12-01 as requested.
- OPPORTUNITY FOR  
PUBLIC COMMENT                      In keeping with the Brown Act, Doctor Ungersma again asked if any members of the public would like to comment on any items listed on the

Notice for this meeting, or on any items of interest. No comments were heard.

ADJOURNMENT

The meeting was adjourned at 12:15 p.m..

\_\_\_\_\_  
John Ungersma, M.D., Vice President

Attest:

\_\_\_\_\_  
Denise Hayden, Treasurer

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**BUDGET VARIANCE ANALYSIS**

**Mar-12 PERIOD ENDING**

**In the month, NIH was**

	<b>27%</b>	<b>over budget in IP days;</b>
(	<b>0.068%</b>	<b>) pver budget IP Revenue and</b>
(	<b>-0.4%</b>	<b>) under in OP Revenue resulting in</b>
<b>\$ 153,169</b>	(	<b>2.0%</b> ) <b>over in gross patient revenue from budget &amp;</b>
<b>\$ (102,569)</b>	(	<b>-2.2%</b> ) <b>under in net patient revenue from budget</b>

**Total Expenses were:**

<b>\$ (210,141)</b>	(	<b>-4.5%</b> ) <b>under budget. Wages and Salaries were</b>
<b>\$ 115,606</b>	(	<b>7.0%</b> ) <b>over budget and Employee Benefits</b>
<b>\$ 16,766</b>	(	<b>1.6%</b> ) <b>over budget.</b>
<b>\$ (101,063)</b>		<b>of non-operating income (loss) resulted in a net</b>
<b>\$ 142,174</b>	<b>\$</b>	<b>12,322</b> <b>income of</b>
		<b>over budget.</b>

**The following expense areas were over budget for the month:**

<b>\$ 115,606</b>	<b>7%</b>	<b>Salaries &amp; Wages</b>
<b>\$ 16,766</b>	<b>2%</b>	<b>Employee Benefits</b>
<b>\$ 44,159</b>	<b>11%</b>	<b>Professional Fees</b>

**Other Information:**

<b>42.37%</b>	<b>Contractual Percentages for month</b>
<b>39.38%</b>	<b>Contractual Percentages for Year</b>

**\$ 2,158,529 Year-to-date Net Revenue**

**Special Notes:**

**340B Activity was Cardinal past invoices for 340B drug replenished to Retail Pharmacy. Year-to-date is an accurate reflection of the net activity for 340B Prior Period Adjustment is Medi-Cal Cost report related**

# NORTHERN INYO HOSPITAL

## Balance Sheet

March 31, 2012

amounts 1,000

	<u>Current Month</u>	<u>Prior Month</u>	<u>FYE 2011</u>
<b>Current assets:</b>			
Cash and cash equivalents	639	1,810	7,402
<b>Short-term investments</b>	3,882	3,914	12,443
Assets limited as to use	0	0	0
Plant Expansion and Replacement Cash	0	0	0
Other Investments (Partnership)	1,311	1,311	1,311
Patient receivable, less allowance for doubtful accounts \$545,111	10,244	10,910	8,782
Other receivables (Includes GE Financing Funds)	686	594	541
Inventories	2,404	2,398	2,457
Prepaid expenses	1,043	1,152	1,166
<b>Total current assets</b>	<u>20,209</u>	<u>22,089</u>	<u>34,103</u>
<b>Assets limited as to use:</b>			
Internally designated for capital acquisitions	827	827	826
Specific purpose assets	762	762	599
	<u>1,589</u>	<u>1,589</u>	<u>1,426</u>
<b>Revenue bond funds held by trustee</b>	<u>2,329</u>	<u>2,192</u>	<u>2,314</u>
Less amounts required to meet current obligations	0	0	0
<b>Net Assets limited as to use:</b>	<u>3,918</u>	<u>3,781</u>	<u>3,740</u>
<b>Long-term investments</b>	<u>250</u>	<u>250</u>	<u>250</u>
<b>Property and equipment, net of accumulated depreciation and amortization</b>	<u>86,040</u>	<u>85,031</u>	<u>69,861</u>
<b>Unamortized bond costs</b>	<u>915</u>	<u>920</u>	<u>957</u>
<b>Total assets</b>	<u>111,332</u>	<u>112,071</u>	<u>108,911</u>



# NORTHERN INYO HOSPITAL

## Balance Sheet

March 31, 2012

amounts 1,000

### Liabilities and net assets

	<u>Current Month</u>	<u>Prior Month</u>	<u>FYE 2011</u>
<b>Current liabilities:</b>			
Current maturities of long-term debt	141	208	1,627
Accounts payable	1,745	2,301	825
Accrued salaries, wages and benefits	3,391	3,768	3,608
Accrued interest and sales tax	772	601	265
Deferred income	144	192	0
Due to third-party payors	2,517	2,517	2,246
Due to specific purpose funds	0	0	0
<b>Total current liabilities</b>	<u>8,710</u>	<u>9,587</u>	<u>8,571</u>
<b>Long-term debt, less current maturities</b>	47,394	47,394	47,394
Bond Premium	1,338	1,343	1,377
<b>Total long-term debt</b>	<u>48,732</u>	<u>48,736</u>	<u>48,771</u>
<b>Net assets:</b>			
Unrestricted	53,128	52,986	50,970
Temporarily restricted	762	762	599
<b>Total net assets</b>	<u>53,890</u>	<u>53,748</u>	<u>51,569</u>
<b>Total liabilities and net assets</b>	<u>111,332</u>	<u>112,071</u>	<u>108,911</u>

**NORTHERN INYO HOSPITAL**  
**Statement of Operations amounts in 1,000**  
*As of March 31, 2012*

	MTD Actual	MTD Budget	MTD Variance \$	MTD Variance %	YTD Actual	YTD Budget	YTD Variance \$	YTD Variance %	Prior YTD
<b>Unrestricted revenues, gains and other support:</b>									
In-patient service revenue:									
Routine	642	574	68	11.9	4,828	5,092	(263)	(5.2)	4,799
Ancillary	2,109	2,002	107	5.3	15,346	17,761	(2,415)	(13.6)	16,949
Total in-patient service revenue	2,752	2,576	175	0.068	20,174	22,852	(2,678)	-11.7%	21,748
Out-patient service revenue	5,218	5,240	(22)	(0.4)	47,191	46,488	703	1.5	44,171
<b>Gross patient service revenue</b>	<b>7,970</b>	<b>7,817</b>	<b>153</b>	<b>2.00</b>	<b>67,365</b>	<b>69,340</b>	<b>(1,975)</b>	<b>(2.9)</b>	<b>65,918</b>
<b>Less deductions from patient service revenue:</b>									
Patient service revenue adjustments	213	129	(83)	(64.6)	1,557	1,146	(411)	(35.9)	1,274
Contractual adjustments	3,341	2,955	(386)	(13.1)	26,018	26,212	194	0.7	24,813
Prior Period Adjustments	(214)	0	214	100.0	(2,559)	0	2,559	100.0	(4,455)
<b>Total deductions from patient service revenue</b>	<b>3,340</b>	<b>3,084</b>	<b>(256)</b>	<b>(8.3)</b>	<b>25,016</b>	<b>27,358</b>	<b>2,342</b>	<b>8.6</b>	<b>21,632</b>
<b>Net patient service revenue</b>	<b>4,630</b>	<b>4,733</b>	<b>(103)</b>	<b>-2%</b>	<b>42,349</b>	<b>41,982</b>	<b>367</b>	<b>1%</b>	<b>44,287</b>
Other revenue	16	41	(25)	(61.6)	270	363	(93)	(25.7)	327
Transfers from Restricted Funds for Other Operating Expenses	97	90	7	7.6	874	801	74	9.2	722
<b>Total Other revenue</b>	<b>113</b>	<b>131</b>	<b>(18)</b>	<b>(14.0)</b>	<b>1,144</b>	<b>1,163</b>	<b>(20)</b>	<b>(1.7)</b>	<b>1,049</b>
<b>Total revenue, gains and other support</b>	<b>4,743</b>	<b>4,864</b>	<b>(121)</b>	<b>(14.0)</b>	<b>43,493</b>	<b>43,146</b>	<b>347</b>	<b>(1.7)</b>	<b>45,336</b>
<b>Expenses:</b>									
Salaries and wages	1,769	1,653	(116)	(7.0)	15,134	14,666	(468)	(3.2)	14,009
Employee benefits	1,068	1,051	(17)	(1.6)	9,393	9,328	(66)	(0.7)	9,119
Professional fees	449	405	(44)	(10.9)	4,148	3,595	(553)	(15.4)	3,624
Supplies	390	484	95	19.6	4,436	4,297	(139)	(3.2)	4,150
Purchased services	232	242	10	4.3	1,924	2,147	223	10.4	2,199
Depreciation	226	327	101	30.9	1,903	2,897	993	34.3	2,630
Interest	100	115	14	12.5	915	1,019	104	10.2	948
Bad debts	37	202	165	81.7	1,510	1,789	279	15.6	1,637
Other	229	230	1	0.6	2,164	2,043	(122)	(6.0)	2,037
<b>Total expenses</b>	<b>4,500</b>	<b>4,710</b>	<b>210</b>	<b>4.5</b>	<b>41,529</b>	<b>41,780</b>	<b>251</b>	<b>0.6</b>	<b>40,353</b>
<b>Operating income (loss)</b>	<b>243</b>	<b>154</b>	<b>89</b>	<b>(18.5)</b>	<b>1,964</b>	<b>1,366</b>	<b>598</b>	<b>(2.3)</b>	<b>4,983</b>
<b>Other income:</b>									
District tax receipts	48	43	5	11.1	433	384	49	12.7	383
Interest	(32)	27	(58)	(218.3)	58	237	(179)	(75.6)	237
Other	3	5	(2)	(46.7)	27	46	(19)	(41.8)	46
Grants and Other Non-Restricted Contributions	0	5	(5)	(100.0)	34	46	(11)	(25.1)	41
Partnership Investment Income	0	3	(3)	(100.0)	33	23	11	-	0
Net Medical Office Activity	(117)	(107)	(10)	N/A	(804)	(949)	146	15.3	(950)
Net 340B Drug Program	(4)	0	(4)	N/A	413	0	413	N/A	0
<b>Total other income, net</b>	<b>(101)</b>	<b>(24)</b>	<b>(77)</b>	<b>-</b>	<b>194</b>	<b>(214)</b>	<b>408</b>	<b>190.9</b>	<b>(243)</b>
<b>Excess (deficiency) of revenues over expenses</b>	<b>142</b>	<b>130</b>	<b>12</b>	<b>9.5</b>	<b>2,159</b>	<b>1,152</b>	<b>1,006</b>	<b>87.4</b>	<b>4,740</b>
Contractual Percentage	42.37%	42.03%			39.38%	42.03%			35.30%

# NORTHERN INYO HOSPITAL

## Statement of Operations--Statistics

As of March 31, 2012

	Month		Month		Year		Year	
	Actual	Budget	Variance	Percentage	Actual	Budget	Variance	Percentage
<b>Operating statistics:</b>								
Beds	25	25	N/A	N/A	25	25	N/A	N/A
Patient days	235	185	50	1.27	1,742	1,644	98	1.06
Maximum days per bed capacity	775	775	N/A	N/A	6,850	6,875	N/A	N/A
Percentage of occupancy	30.32	23.87	6.45	1.27	25.43	23.91	1.52	1.06
Average daily census	7.58	5.97	1.61	1.27	6.36	5.98	0.38	1.06
Average length of stay	2.80	2.50	0.30	1.12	2.72	2.50	0.22	1.09
Discharges	84	74	10	1.14	641	657	(16)	1
Admissions	84	75	9	1.12	652	666	(14)	1
Gross profit-revenue depts.	5,320,701	5,167,616	153,085	1.03	43,461,870	45,841,850	(2,379,980)	0.95
<b>Percent to gross patient service revenue:</b>								
Deductions from patient service revenue and bad debts	42.37	42.03	0.34	1.01	39.38	42.03	(2.65)	0.94
Salaries and employee benefits	35.39	34.48	0.91	1.03	36.19	34.48	1.71	1.05
Occupancy expenses	4.31	6.02	(1.71)	0.72	4.62	6.02	(1.40)	0.77
General service departments	6.00	5.85	0.15	1.03	6.14	5.85	0.29	1.05
Fiscal services department	4.68	5.34	(0.66)	0.88	5.42	5.34	0.08	1.01
Administrative departments	5.62	4.96	0.66	1.13	5.69	4.96	0.73	1.15
Operating income (loss)	0.43	(0.21)	0.64	(2.05)	1.17	(0.21)	1.38	(5.57)
Excess (deficiency) of revenues over expenses	1.78	1.66	0.12	1.07	3.20	1.66	1.54	1.93
<b>Payroll statistics:</b>								
Average hourly rate (salaries and benefits)	52.26	44.94	7.33	1.16	47.51	44.94	2.57	1.06
Worked hours	47,955.90	51,541.00	(3,585.10)	0.93	436,134.09	457,214.00	(21,079.91)	0.95
Paid hours	53,962.77	59,973.00	(6,010.23)	0.90	513,166.78	532,020.00	(18,853.22)	0.96
Full time equivalents (worked)	272.48	292.85	(20.37)	0.93	279.57	292.90	(13.33)	0.95
Full time equivalents (paid)	306.61	340.76	(34.15)	0.90	328.95	340.82	(11.87)	0.97

# NORTHERN INYO HOSPITAL

## Statements of Changes in Net Assets

As of March 31, 2012

	<u>Month-to-date</u>	<u>Year-to-date</u>
<b>Unrestricted net assets:</b>		
Excess (deficiency) of revenues over expenses	142,173.55	2,158,529.20
Net Assets due/to transferred from unrestricted	-	-
Hospice Purchased Services; Income Statement Item	(140.00)	(230.00)
Net assets released from restrictions used for operations	-	-
<b>Net assets released from restrictions used for payment of long-term debt</b>	<b>(97,134.58)</b>	<b>(874,211.22)</b>
Contributions and interest income	33.94	307.91
<b>Increase in unrestricted net assets</b>	<b>44,932.91</b>	<b>1,284,395.89</b>
<b>Temporarily restricted net assets:</b>		
District tax allocation	-	781,924.95
Net assets released from restrictions	-	(634,307.50)
Restricted contributions	-	15,200.00
Interest income	13.73	78.33
Net Assets for Long-Term Debt due from County	97,134.58	874,211.22
<b>Increase (decrease) in temporarily restricted net assets</b>	<b>97,148.31</b>	<b>1,037,107.00</b>
<b>Increase (decrease) in net assets</b>	<b>142,081.22</b>	<b>2,321,502.89</b>
<b>Net assets, beginning of period</b>	<b>53,748,272.38</b>	<b>51,568,850.71</b>
<b>Net assets, end of period</b>	<b>53,890,353.60</b>	<b>53,890,353.60</b>

# NORTHERN INYO HOSPITAL

## Statements of Cash Flows

*As of March 31, 2012*

	<u>Month-to-date</u>	<u>Year-to-date</u>
<b>Cash flows from operating activities:</b>		
Increase (decrease) in net assets	142,081.22	2,321,502.89
Adjustments to reconcile excess of revenues over expenses to net cash provided by operating activities: (correcting fund deposit)		
Depreciation	225,764.36	1,903,459.99
Provision for bad debts	36,906.53	1,510,482.18
Loss (gain) on disposal of equipment	-	-
(Increase) decrease in:		
Patient and other receivables	536,752.03	(3,117,459.57)
Other current assets	103,269.76	176,458.00
Plant Expansion and Replacement Cash	-	-
Increase (decrease) in:		
Accounts payable and accrued expenses	(810,608.31)	1,354,783.40
Third-party payors	-	270,365.64
<b>Net cash provided (used) by operating activities</b>	<u>234,165.59</u>	<u>4,419,592.53</u>
 <b>Cash flows from investing activities:</b>		
Purchase of property and equipment	(1,234,018.09)	(18,081,964.38)
Purchase of investments	31,887.50	8,561,146.75
Proceeds from disposal of equipment	-	-
<b>Net cash provided (used) in investing activities</b>	<u>(1,202,130.59)</u>	<u>(9,520,817.63)</u>
 <b>Cash flows from financing activities:</b>		
Long-term debt	(70,531.37)	(1,525,132.76)
Issuance of revenue bonds	(136,979.38)	(15,024.75)
Unamortized bond costs	4,626.77	41,640.93
Increase (decrease) in donor-restricted funds, net	(47.67)	(163,203.69)
<b>Net cash provided by (used in) financing activities</b>	<u>(202,931.65)</u>	<u>(1,661,720.27)</u>
 <b>Increase (decrease) in cash and cash equivalents</b>	<u>(1,170,896.65)</u>	<u>(6,762,945.37)</u>
 <b>Cash and cash equivalents, beginning of period</b>	<u>1,810,385.64</u>	<u>7,402,434.36</u>
 <b>Cash and cash equivalents, end of period</b>	<u>639,488.99</u>	<u>639,488.99</u>

**Northern Inyo Hospital**  
**Summary of Cash and Investment Balances**  
**Calendar Year 2012**

Month	<u>Operations Checking Account</u>				<u>Time Deposit Month-End Balances</u>							* Total Revenue Bond Funds	General Obligation Bond Fund
	Balance at Beginning of Month	Deposits	Disbursements	Balance at End of Month	Investment Operations Fund	Bond and Interest Fund	Equipment Donations Fund	Childrens Fund	Scholarship Fund	Tobacco Settlement Fund			
January	3,687,088	4,962,560	8,236,474	413,174	6,235,247	743,285	26,606	3,015	19,028	800,088	2,047,447	-	
February	413,174	6,959,238	5,507,071	1,865,341	4,163,794	739,978	26,606	3,015	19,028	800,120	2,191,899	-	
March	1,865,341	5,615,702	6,692,972	788,071	4,131,906	739,991	26,606	3,015	19,028	800,153	2,328,878	-	
Prior Year													
April	8,032,045	4,976,646	9,187,639	3,821,052	17,729,613	592,220	26,599	2,815	4,027	799,780	2,531,814	593	
May	3,821,052	9,962,528	6,016,138	7,767,442	14,707,953	592,220	26,599	2,815	4,027	799,816	2,688,329	593	
June	7,767,442	6,502,436	6,807,040	7,462,838	12,693,053	592,296	26,603	2,815	4,028	799,849	2,413,318	-	
July	7,462,838	6,842,689	6,021,265	8,284,262	9,648,452	631,498	26,603	2,815	4,028	799,881	2,450,834	-	
August	8,284,262	9,931,004	6,969,573	11,245,693	7,663,367	631,498	26,603	2,815	4,028	799,918	2,587,816	-	
September	11,245,693	4,378,829	7,163,803	8,460,718	7,629,512	631,558	26,605	3,015	4,028	799,951	2,724,799	-	
October	8,460,718	4,652,466	7,563,728	5,549,457	7,379,819	558	26,605	3,015	4,028	799,986	2,861,783	-	
November	5,549,457	4,641,126	6,735,075	3,455,507	7,334,904	558	26,605	3,015	4,028	800,019	3,018,067	-	
December	3,455,507	5,229,268	4,997,687	3,687,088	7,234,922	558	26,606	3,015	4,028	800,052	1,766,583	-	

Notes: Revenue Bond Fund includes 2010 Revenue Bond and 1998 Revenue Bond Funds held by Trustee for Debt coverage and Reserves

Investments as of March 31, 2012

Institution	Certificate ID	Purchase Dt	Maturity Dt	Principal	YTM	Broker
LAIF (Walker Fund)	20-14-002 Walker	13-Jan-12	01-Feb-12	\$320,534	0.04%	Northern Inyo Hospital
BP CAP MKTS	05565ABG2	16-Dec-10	01-Apr-12	\$2,539,063	0.01%	Multi-Bank Service
Morgan Stanley Bank	617446-HC-6	21-Nov-11	01-Apr-12	\$1,022,310	0.41%	Multi-Bank Service
<b>Total Short Term Investments</b>				<b>\$3,881,906</b>		
First Republic Bank-Div of BOFA FNC	5128639	20-May-10	20-May-13	\$150,000	2.40%	Financial Northeaster Corp.
First Republic Bank-Div of BOFA FNC	5128638	20-May-10	20-May-15	\$100,000	3.10%	Financial Northeaster Corp.
<b>Total Long Term Investments</b>				<b>\$250,000</b>		
<b>Grand Total Investments</b>				<b>\$4,131,906</b>		

**Financial Indicators**

	Target	Mar-12	Feb-12	Jan-12	Dec-11	Nov-11	Oct-11	Sep-11	Aug-11	Jul-11	Jun-11	May-11	Apr-11
Current Ratio	>1.5-2.0	2.32	2.30	2.46	2.29	2.59	2.88	3.09	3.29	3.62	3.98	4.49	5.34
Quick Ratio	>1.33-1.5	1.85	1.87	2.01	1.83	2.11	2.40	2.58	2.79	2.89	3.49	3.87	4.30
Days Cash on Hand	>75	114.14	130.20	110.67	144.88	136.28	152.23	177.78	186.45	191.12	231.83	165.71	195.53



NORTHERN INYO HOSPITAL  
STATISTICS

MONTHS 2012	IP			SURGERIES			TOTAL			BIRTHS			ADMITTS			ER			OP REFERRALS			ADMITTS (W/NB)			PT DAYS (W/O NB)			PT DAYS (W/NB)			DISCH (W/NB)					
	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12							
	26 / 28 / 31	95 / 88 / 92	121 / 116 / 123	47 / 36 / 22	604 / 600 / 681	3157 / 3223 / 3082	99 / 93 / 110	304 / 285 / 225	337 / 314 / 263	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12						
JANUARY	26 / 28 / 31	95 / 88 / 92	121 / 116 / 123	47 / 36 / 22	604 / 600 / 681	3157 / 3223 / 3082	99 / 93 / 110	304 / 285 / 225	337 / 314 / 263	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12						
FEBRUARY	15 / 31 / 13	82 / 86 / 88	97 / 117 / 101	25 / 36 / 29	487 / 599 / 505	3066 / 3109 / 2973	81 / 94 / 68	209 / 204 / 145	235 / 238 / 173	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12						
MARCH	42 / 18 / 23	104 / 90 / 70	146 / 108 / 93	47 / 43 / 38	663 / 565 / 559	3504 / 3537 / 3001	120 / 78 / 107	254 / 212 / 235	301 / 234 / 271	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12						
APRIL	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /					
MAY	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /				
JUNE	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /				
JULY	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /			
AUGUST	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /			
SEPTEMBER	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /			
OCTOBER	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /		
NOVEMBER	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /		
DECEMBER	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	
CALENDAR YEAR	83 / 77 / 67	281 / 264 / 250	364 / 341 / 317	52 / 43 / 60	119 / 115 / 89	1754 / 1764 / 1745	9727 / 9869 / 9056	300 / 265 / 285	767 / 701 / 605	873 / 786 / 707	100 / 88 / 95	256 / 234 / 202	291 / 262 / 236	297 / 266 / 284	28 / 26 / 22	94 / 88 / 83	121 / 114 / 106	17 / 14 / 20	40 / 38 / 30	585 / 588 / 582	3,242 / 3,290 / 3,019	100 / 88 / 95	256 / 234 / 202	291 / 262 / 236	297 / 266 / 284	28 / 26 / 22	94 / 88 / 83	121 / 114 / 106	17 / 14 / 20	40 / 38 / 30	585 / 588 / 582	3,242 / 3,290 / 3,019	100 / 88 / 95	256 / 234 / 202	291 / 262 / 236	297 / 266 / 284
MONTHLY AVERAGE	28 / 26 / 22	94 / 88 / 83	121 / 114 / 106	17 / 14 / 20	40 / 38 / 30	585 / 588 / 582	3,242 / 3,290 / 3,019	100 / 88 / 95	256 / 234 / 202	291 / 262 / 236	297 / 266 / 284	28 / 26 / 22	94 / 88 / 83	121 / 114 / 106	17 / 14 / 20	40 / 38 / 30	585 / 588 / 582	3,242 / 3,290 / 3,019	100 / 88 / 95	256 / 234 / 202	291 / 262 / 236	297 / 266 / 284	28 / 26 / 22	94 / 88 / 83	121 / 114 / 106	17 / 14 / 20	40 / 38 / 30	585 / 588 / 582	3,242 / 3,290 / 3,019	100 / 88 / 95	256 / 234 / 202	291 / 262 / 236	297 / 266 / 284			

NORTHERN INYO HOSPITAL  
DEPARTMENTAL NON-EMERGENCY OUTPATIENT VISITS

MONTHS 2012	DIAGNOSTIC RADIOLOGY	MAMMOGRAPHY	NUCLEAR MEDICINE	ULTRASOUND	CT SCANNING	MRI	LABORATORY	EKG/EEG	PHYSICAL THERAPY	RESPIRATORY THERAPY	RURAL HEALTH CLINIC	TOTALS
	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12	10 / 11 / 12
JANUARY	622 / 742 / 703	330 / 192 / 181	77 / 34 / 37	198 / 242 / 244	167 / 185 / 164	658 / 400 / 113	1619 / 1661 / 1485	96 / 99 / 110	352 / 558 / 411	17 / 18 / 16	1220 / 1352 / 1529	5366 / 5183 / 4993
FEBRUARY	542 / 644 / 650	313 / 190 / 180	51 / 41 / 28	201 / 251 / 210	147 / 155 / 138	458 / 91 / 114	1522 / 1497 / 1414	114 / 126 / 134	376 / 596 / 375	15 / 23 / 10	1254 / 1207 / 1390	4981 / 4821 / 4643
MARCH	567 / 693 / 714	321 / 201 / 175	99 / 46 / 49	206 / 243 / 256	170 / 196 / 181	440 / 115 / 143	1795 / 1786 / 1429	117 / 139 / 93	449 / 712 / 414	9 / 27 / 12	1404 / 1273 / 1455	5577 / 5431 / 4821
APRIL	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /
MAY	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /
JUNE	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /
JULY	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /
AUGUST	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /
SEPTEMBER	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /
OCTOBER	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /
NOVEMBER	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /
DECEMBER	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /	/ / /
CALENDAR YEAR	1731 / 2079 / 2087	964 / 583 / 536	227 / 121 / 114	605 / 736 / 710	484 / 536 / 483	1554 / 306 / 370	4836 / 4944 / 4328	327 / 364 / 337	1177 / 1866 / 1200	41 / 68 / 38	3878 / 3832 / 4374	15924 / 15435 / 14557
MONTHLY AVERAGES	577 / 693 / 689	321 / 194 / 179	76 / 40 / 38	202 / 245 / 237	161 / 179 / 161	518 / 102 / 123	1645 / 1648 / 1443	109 / 121 / 112	392 / 622 / 400	14 / 23 / 13	1293 / 1277 / 1458	5308 / 5145 / 4852

\*Radiology has changed their methodology for capturing statistics and feel these are more accurate. They are much higher than previously reported.

**Northern Inyo Hospital**  
**Monthly Report of Capital Expenditures**  
**Fiscal Year Ending JUNE 30, 2012**  
**As of March 31, 2012**

<b>MONTH APPROVED BY BOARD</b>	<b>DESCRIPTION OF APPROVED CAPITAL EXPENDITURES</b>	<b>AMOUNT</b>
FY 2008-09	Coagulation Analyzer	25,000
FY 2009-10	Platelet Function Analyzer	9,000
	PMA-IT Server Room Wiring Project	34,625
	Nexus VOIP Telephone System	958,776
	Siemens Analyzers EXL/EXL200	250,940
FY 2010-11	McKesson Paragon Hospital Information System                      Capital Fees Only	2,687,694
	PenRad Mammography Software	20,000
	Kronos Workforce HR and Payroll	244,000
	AMOUNT APPROVED BY THE BOARD IN PRIOR FISCAL YEARS TO BE EXPENDED IN THE CURRENT FISCAL YEAR	<u>4,230,035</u>
FY 2011-12	Bladder Scanner for ER to be purchased by NIH Auxillary Donation	13,145
	Transport Monitor for PACU to be purchased by NIH Auxillary Donation	15,000
	GE/DATEX Anesthesia Patient Monitors	97,637
	Additional Copper and Fiberoptic Cable	29,884
	Paragon Physician Documentation Module	137,254
	AMOUNT APPROVED BY THE BOARD IN THE CURRENT FISCAL YEAR TO BE EXPENDED IN THE CURRENT FISCAL YEAR	<u>292,920</u>
	Amount Approved by the Board in Prior Fiscal Years to be Expended in the Current Fiscal Year	4,230,035
	Amount Approved by the Board in the Current Fiscal Year to be Expended in the Current Fiscal Year	<u>292,920</u>
	Year-to-Date Board-Approved Amount to be Expended	4,522,955
	Year-to-Date Administrator-Approved Amount	130,589 *
	Actually Expended in Current Fiscal Year	<u>                    *</u>

Northern Inyo Hospital  
 Monthly Report of Capital Expenditures  
 Fiscal Year Ending JUNE 30, 2012  
 As of March 31, 2012

MONTH APPROVED BY BOARD	DESCRIPTION OF APPROVED CAPITAL EXPENDITURES	AMOUNT
	Year-to-Date Completed Building Project Expenditures	0 *
	TOTAL FUNDS APPROVED TO BE EXPENDED	<u>4,653,544</u>
	<b>Total-to-Date Spent on Incomplete Board Approved Expenditures</b>	<b>871,635</b>
 Reconciling Totals:		
	Actually Capitalized in the Current Fiscal Year Total-to-Date	130,589
	Plus: Lease Payments from a Previous Period	0
	Less: Lease Payments Due in the Future	0
	Less: Funds Expended in a Previous Period	0
	Plus: Other Approved Expenditures	<u>4,522,955</u>
	<b>ACTUAL FUNDS APPROVED IN THE CURRENT FISCAL YEAR TOTAL-TO-DATE</b>	<b><u>4,653,544</u></b>

Donations by Auxiliary	0
Donations by Hospice of the Owens Valley	0
+Tobacco Funds Used for Purchase	0
	<u>0</u>
	<u>0</u>

\*Completed Purchase

(Note: The budgeted amount for capital expenditures for all priority requests for the fiscal year ending June 30, 2011, is \$515,769 coming from existing hospital funds.)

\*\*Completed in prior fiscal year

**Northern Inyo Hospital**  
**Monthly Report of Capital Expenditures**  
**Fiscal Year Ending JUNE 30, 2012**  
**As of March 31, 2012**

<b>Administrator-Approved Item(s)</b>	<b>Department</b>	<b>Amount</b>	<b>Month Total</b>	<b>Grand Total</b>
FUJITSU FI-6770A SCAN	BILLING OFFICE	6,415		
<b>MONTH ENDING MARCH 2012</b>			<b>6,415</b>	<b>130,589</b>

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# NORTHERN INYO HOSPITAL

## SECURITY REPORT

MARCH 2012

### FACILITY SECURITY

Access security during this period revealed five instances of open or unsecured entry doors being located during those hours when doors were to be secured. Four interior doors were found during this same period.

Numerous alarms were identified in the new building during this period. All were false alarms due to construction activities.

### HUMAN SECURITY

On March 1<sup>st</sup>, a citizen called into the Hospital and reported numerous juveniles hanging around the Birch Street property. Security Staff responded and contacted three young teens riding scooters on the property at Birch Street. No unlawful activities were suspected and the property checked secure.

On March 3<sup>rd</sup> Inyo County Mental Health Staff was standing by with a patient being cleared for a 5150 transfer and hold. During this time the patient requested a cigarette and was accompanied outside by Mental Health Staff. Once outside the patient fled on foot. Security Staff call Bishop Police, who shortly thereafter took the subject into custody. The patient was then held at the PD pending transfer.

On March 4<sup>th</sup> at approximately 0430 hours, Security Staff observed an unknown male subject, walking south from the area between A Floor and the Outpatient Services Building. This subject then entering into a vehicle parked in the main parking lot. Security was able to obtain a good description of the vehicle and the license plate number as it left the parking lot.

A check of Campus revealed a bicycle leaned up against the dumpster located at the northwest corner of the parking lot for the Pioneer Building. Found with the bicycle was a set of tool bags containing some small power tools and numerous hand tools. Security recognized the bicycle as one normally observed locked in the bike rack near the entrance to Rural Health. The bicycle rack was found to have been taken apart as to allow the removal of the bicycle from it.

The Police Department was contacted and officers responded to the scene. Shortly after the arrival of Police Personnel, the subject seen earlier returned and drove around the north side of the Pioneer Building only to be met by the Police and Security.

The subject was detained by the Police and an investigation was initiated. The investigation resulted in a search of the vehicle and the arrest of the subject on numerous charges including possession of stolen property, possession of burglary tools, a Felon in unlawful possession of a firearm and possession of methamphetamine and paraphernalia. This subject was later booked and transported to the Inyo County Jail.

On March 14<sup>th</sup>, Security was called to the ER for a patient, who in the past has demonstrated uncooperative and disruptive behavior. Security stood by with this patient until treated and discharged.

On March 25<sup>th</sup>, Security was called to the ICU for a combative patient. This patient was controlled and medicated without further incident.

On March 29<sup>th</sup> and 30<sup>th</sup>, Security was called to the ICU for this same patient who was again becoming uncooperative and combative.

Security Staff provided Law Enforcement assistance on nine occasions this month.

5150 standby was provided on three instances this month.

Security Staff provided patient assistance on thirty two occasions during this period.



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**NORTHERN INYO HOSPITAL**  
*Northern Inyo County Local Hospital District*  
150 Pioneer Lane, Bishop, California 93514

Medical Staff Office  
(760) 873-2136  
(760) 873-2130

voice  
fax

TO: NICLHD Board of Directors

FROM: Robbin Cromer-Tyler, MD  
NIH Chief of Staff

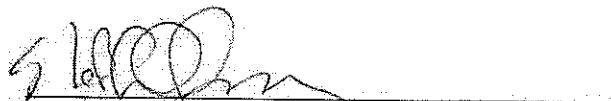
DATE: May 1, 2012

RE: Medical Executive Committee Report

The Medical Executive Committee met on this date. Following careful review and consideration, the Committee agreed to recommend to the NICLHD Board of Directors approval of the following:

1. Appointment to the NIH Provisional Medical Staff, with privileges as requested, of the following:
  - a. Board-certified cardiologists Theodore Berndt, MD, Thomas DaVee, MD, Richard Seher, MD, and Robert Swackhamer, MD, affiliated with Renown Medical Center, with telemedicine privileges as requested to remotely read echocardiograms;
  - b. Board-certified internist and hospitalist Sudhir Kakarla, MD, with privileges as requested and a waiver of the Bylaws residency requirement for Active Staff;
  - c. Board-certified radiologist Natalia Zarzhevsky, MD, with privileges as requested.

These recommendations are made pursuant to careful review of each Staff member's application and supporting documentation.

  
Robbin Cromer-Tyler, MD, Chairman

**NORTHERN INYO HOSPITAL  
POLICY AND PROCEDURE**

Title: VapoTherm	
Scope: Respiratory Therapists	Department: Respiratory Care
Source: Director of Respiratory Care	Effective Date: August 4, 2011

**PURPOSE:**

The VapoTherm system is used to add warm moisture to breathing gases for administration to patients, including infant, pediatrics and adults, at flow rates from 1 to 40 liters per minute via nasal cannulas.

**POLICY:**

Heat and humidity prevents airway water-loss, airway cooling, thickened secretions, nasal irritation and bleeding. The high flow nasal cannula delivery system has been designed to safely provide optimal humidity to both infants and adult patients who require higher humidity and FiO<sub>2</sub> levels than a traditional cannula can provide.

**INDICATIONS:**

1. Documented hypoxemia
  - a. Adults: defined as a decreased PaO<sub>2</sub> in the blood below normal range , PaO<sub>2</sub> < 60 mmHg or SaO<sub>2</sub> of < 90% while breathing room air.
  - b. Pediatric: defined as a decreased PaO<sub>2</sub> in the blood below normal range, PaO<sub>2</sub> of < 65 mmHg or SaO<sub>2</sub> of < 92 while breathing room air.
  - c. PaO<sub>2</sub> and / or SaO<sub>2</sub> below desirable range for specific clinical situation.
2. An acute care situation in which hypoxemia is suspected.
3. Severe trauma.
4. Acute myocardial infarction.
5. Short-term therapy or surgical intervention (e.g., post-anesthesia recovery hip surgery, etc.)

**CONTRAINDICATIONS:**

No specific contraindications to oxygen therapy exist when indications are judged to be present. Specific to nasal cannula: Patients with occluded or defective nares should not use the system.

**WARNINGS AND CAUTIONS:**

1. The cartridge, disposable water path and delivery tube are labeled as single patient use only and must be replaced after 30 days use on a single patient.
2. Never connect the unit to a patient until it reaches set point temperature (temperature display stops flashing). Allow the unit to warm-up to purge condensate and prevent patient discomfort due to cold or partly humidified gas.
3. The Precision Flow is not MRI compatible.
4. The back-up battery is designed for temporary use only, when AC power to the unit has been interrupted.

**NORTHERN INYO HOSPITAL  
POLICY AND PROCEDURE**

Title: VapoTherm	
Scope: Respiratory Therapists	Department: Respiratory Care
Source: Director of Respiratory Care	Effective Date: August 4, 2011

5. Clamp water supply when not in use, including Standby mode, to prevent damage by water ingress.
6. The oxygen sensor should be replaced after 1 year.
7. The sensor windows in the docking station must not be scratched or damaged. If necessary, clean them only with alcohol wipes (70-90 % isopropyl alcohol).
8. The transparent sensor ports in the docking station must be clean. The unit will not operate if the sensors do not receive a clear signal, see Operating Instruction Manual.

**PRECAUTIONS AND / OR POSSIBLE COMPLICATIONS:**

- a. With PaO<sub>2</sub> >= 60 torr, ventilatory depression may occur in spontaneously breathing patients with chronic elevated PaCO<sub>2</sub>.
- b. With FiO<sub>2</sub> >= 0.5 absorption atelectasis, oxygen toxicity, and / or depression of ciliary function may occur.
- c. Supplemental oxygen should be administered with caution to patients suffering from paraquat poisoning and to patients receiving bleomycin.
- d. Fire hazard is increased in the presence of increased oxygen concentrations.

**LIMITATIONS OF PROCEDURE:**

Oxygen therapy has only limited benefit for the treatment of hypoxia due to anemia, and benefit may be limited with circulatory disturbances. Oxygen therapy should not be used in lieu of but in addition to mechanical ventilation when ventilatory support is indicated.

**ASSESSMENT OF NEED:**

Need is determined by measurement of inadequate oxygen tensions and / or saturations, by invasive or noninvasive methods, and / or the presence of clinical indicators as previously described. Supplemental oxygen flow should be titrated to maintain adequate oxygen saturation as indicated by pulse oximetry SpO<sub>2</sub> or appropriate arterial blood gas values.

**PROCEDURE:**

1. Verify physician orders.
2. Review chart for relevant information.
3. Follow standard precautions.
4. Introduce yourself to the patient.
5. Verify the patient's identify using two identifiers.
6. Explain procedure to the patient and reassure him/her as necessary.

**NORTHERN INYO HOSPITAL  
POLICY AND PROCEDURE**

Title: Vapotherm	
Scope: Respiratory Therapists	Department: Respiratory Care
Source: Director of Respiratory Care	Effective Date: August 4, 2011

Inserting disposable patient circuit

1. Install a high or low-flow vapor transfer cartridge in disposable water path. The cartridge may be inserted either way up. Align the cartridge ports with the disposable water path openings and press firmly into place.
  - a. If a HIGH-FLOW cartridge is installed the flow cannot be set below 5 lpm.
  - b. If a LOW-FLOW cartridge is installed the flow cannot be set above 8 lpm.
2. Fit the delivery tube to the disposable water path. Press firmly into place, both latches must click shut.
3. Open door by sliding it forward to expose the docking station
4. Hold disposable patient circuit by its handle, with the delivery tube downward.
5. Slide disposable patient circuit downward into the docking station until it stops.
6. Press down firmly to ensure correct seating.
7. Close door by sliding it backwards until it stops. If the sliding door does not close easily, check that the cartridge is installed correctly and the disposable water path is fully inserted into the docking station.
8. Plug in power cord, and check that all the display indicators light. The Precision Flow then performs a self-test:
  - a. All icons and numeric displays light up for a few seconds
  - b. Internal sensors and control systems are checked
  - c. If no faults are detected the unit enters STANDBY mode
  - d. "water out" icon indicates there is no water in the disposable water path
  - e. Status LED is amber.
9. Push or rotate the control setting knob in either direction to light up the display in STANDBY mode.
10. To connect the sterile water, remove spike cap and wipe spike with 70- 90% isopropyl alcohol. Firmly insert spike into spike port or the sterile water, avoiding direct hand contact. Unclamp the water inlet tube so that water flow into the disposable water path and the "Water Out" alarm cancels/
11. Press Run/Stan-by button to start gas flow, pump and heater. Press twice if the display is initially blank.
12. Wait for desired set temperature to be reached before placing the cannula on the end of the patient delivery tube. The flashing green status LED becomes steady when the set temperature is reached.
13. Size cannula to patient by ensuring that nasal prongs do not fit tightly into nares (1/2 the diameter of the nares).

**NORTHERN INYO HOSPITAL  
POLICY AND PROCEDURE**

Title: Vapotherm	
Scope: Respiratory Therapists	Department: Respiratory Care
Source: Director of Respiratory Care	Effective Date: August 4, 2011

14. Adjust temperature on Vapotherm unit according to required flow rate.

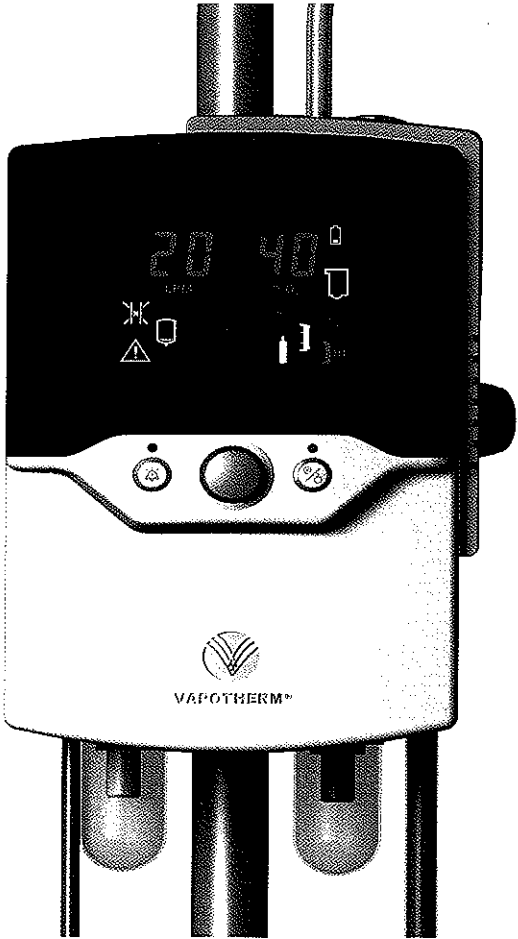
Flow Rate	1-3	4-6	6-8	9 or more
Gas Temperature	33-34 C	34-35 C	35-36 C	36-37 C

**REFERENCES:**

1. AARC Clinical Practice Guideline "Oxygen Therapy for Adults".
2. Vapotherm [www.vtherm.com/products/precision](http://www.vtherm.com/products/precision)

Committee Approval	Date

Revised  
Reviewed  
Supercedes





VAPOTHERM



Clinical Resources

**High Flow Therapy Overview**

**Patient Benefits**

**Published Studies**

**Preliminary Research**

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## clinical resources

### How do patients benefit from Vapotherm?

**Humidity.**

The Vapotherm output is close to 100% relative humidity at body temperature or above and below. Respiratory water loss can be greatly reduced or eliminated, and the high humidity has been found to help mobilize thickened airway secretions.

**Warmth.**

Vapor-saturated respiratory gases are delivered at or above body temperature, so there is no cooling of the airway. Most sensation of nasal flow comes from airway cooling, so even at high flows there is very little sensation with the Vapotherm.

**Comfort.**

The warmth and high humidity contribute to patient comfort. Most patients report that they prefer Vapotherm therapy with a nasal cannula to the use of face masks. Vapotherm use relieves airway irritation, soreness and dryness.

**High Flow.**

Because the Vapotherm is so comfortable to use, high flows are possible. Patients needing high flows of oxygen benefit particularly because they can use a cannula instead of a face mask, and high nasal flow may also reduce shortness of breath and improve gas exchange.

**Convenience.**

A face mask makes it difficult to eat and talk, and may cause distress in claustrophobic patients. The nasal cannula is comparatively unobtrusive and causes much less interference with daily activities.



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VAPOTHERM



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## clinical resources

Vapotherm, Inc. is the market leader in high-flow, thermally-controlled, humidification systems for respiratory therapy. Currently, these medical devices are indicated for use in adding warm moisture to breathing gases to infant, pediatric and adult patients in the hospital, sub-acute institutions and home settings. Vapotherm devices are cleared for delivery of breathing gases by nasal cannula at flow rates of up to 8 lpm in infants and 40 lpm in adults, providing what is known as high flow therapy (HFT).

### What is High Flow Therapy (HFT)?

HFT is defined as flow rates that exceed patient inspiratory flow rates at various minute volumes. Historically, high flow therapy has been used with face masks, where the high flows flush the mask volume to facilitate high inspiratory oxygen fractions. While effective in supporting oxygenation, mask therapy can be limited by factors including ability to eat/drink and communicate, as well as feelings of claustrophobia, leading to poor patient compliance. The standard nasal cannula has been the standby for better compliance and patient comfort. Cannulae provide supplemental oxygen, are comfortable for long periods and allow patients to eat and talk without interruption of the therapy. However, higher flows (over 2 lpm in neonates or 6 lpm in adults) needed to meet inspiratory requirements without allowing entrainment of room air are not possible with conventional nasal cannula therapy. This limitation to conventional cannula therapy is a result of the discomfort and irritation caused by delivering cold, dry gas to the nasal passages. Vapotherm's technology has transformed conventional cannula therapy through optimal conditioning of breathing gas.

Click here to download the White Paper, [High Flow Therapy and Humidification: A Summary of Mechanisms of Action, Technology and Research](#)

Click here to download the White Paper, [Role of Pressure In High Flow Therapy](#)

Click here to download the new presentation, [High Flow Therapy: Mechanisms of Action](#)

### How High Flow Therapy (HFT™) via nasal cannula works?

Conventionally, HFT™ refers to oxygen therapy by way of a non-rebreather mask. The mask is flushed with gas flows that exceed a patient's inspiratory flow rates, and the mask serves as a reservoir of fresh gas. These two conditions eliminate entrainment of room air during inspiration so that a patient can breathe high fractions of oxygen, or breathe whatever gas mixture is intended without dilution by ambient gas.

This video clip from Dr. Brian L. Tiep (Respiratory Disease Management Institute, Monrovia, California) of a head model using a non-rebreather mask shows how the mask works as a reservoir to allow a patient to inspire a given gas mixture. Note that the inspiratory gas still mixes with the end-expiratory gas remaining in the nasopharynx.

Link to non-rebreather [mask](#) video

HFT™ using a nasal cannula will accomplish the same goal as a non-rebreather mask, but uses the nasopharynx as the gas reservoir.

This clip from Dr. Tiep shows how efficiently a nasal cannula can work for HFT™. Note that when the nasopharynx is the reservoir, the inspiratory gas is not diluted by end-expiratory gas remaining in this region of the airways. Therefore, HFT™



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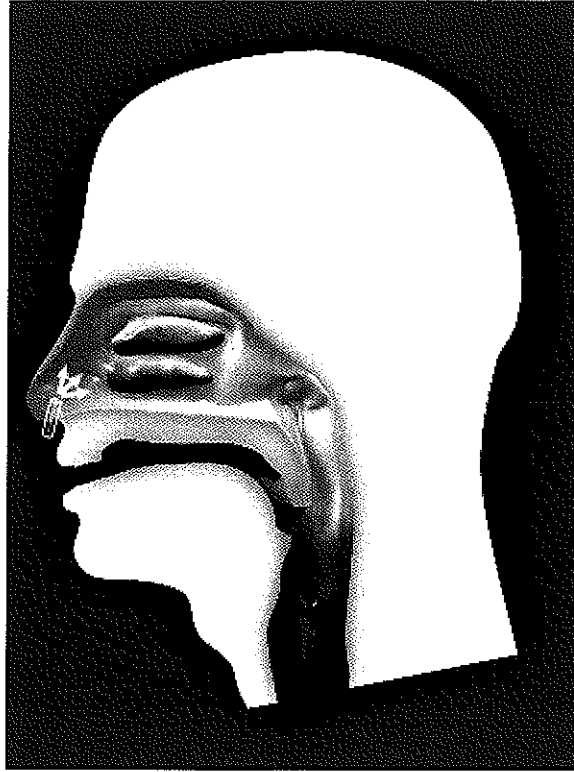
SUBMIT

by nasal cannula is more efficient than a non-rebreather mask. Also, consider the impact that this flush of end-expiratory gas has on CO2 removal.

Link to [nasal cannula](#) video

#### High Flow Therapy Via Cannula

Can enhance respiratory efficiency by flushing nasopharyngeal anatomical dead space and support respiratory work



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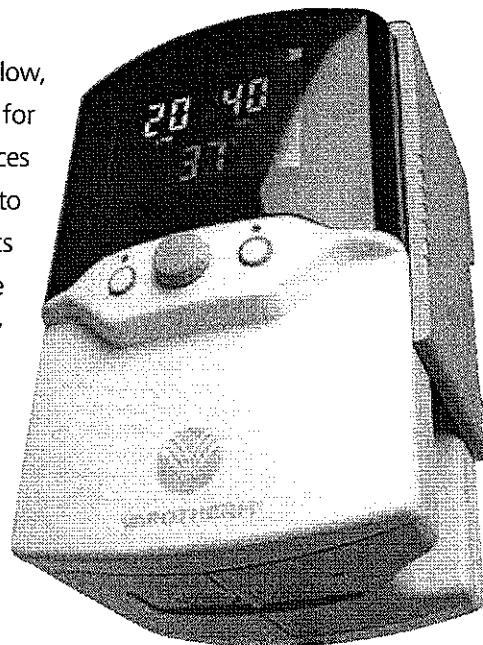
# **High Flow Therapy and Humidification:** A Summary of Mechanisms of Action, Technology and Research

**Thomas Miller, Ph.D**

Director, Clinical Research and Education  
Vapotherm, Inc.  
Research Assistant Professor of Pediatrics  
Jefferson Medical College

## INTRODUCTION

Vapotherm, Inc. is the market leader in high-flow, thermally-controlled, humidification systems for respiratory therapy. Currently, these medical devices are indicated for use in adding warm moisture to breathing gases to infant, pediatric and adult patients in the hospital, sub-acute institutions and home settings. Vapotherm devices are approved for delivery of breathing gases by nasal cannula at flow rates of up to 8 lpm in infants and 40 lpm in adults, providing what is known as high flow therapy (HFT).



### WHAT IS HIGH FLOW THERAPY (HFT)?

HFT is defined as flow rates that exceed patient inspiratory flow rates at various minute volumes. Historically, high flow therapy has been used with face masks, where the high flows flush the mask volume to facilitate high inspiratory oxygen fractions. While effective in supporting oxygenation, mask therapy can be limited by factors including ability to eat/drink and communicate, as well as feelings of claustrophobia, leading to poor patient compliance.

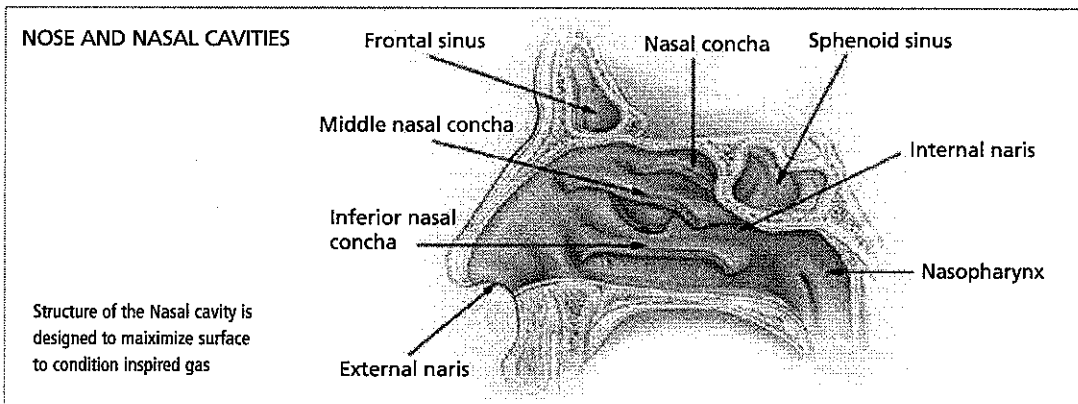
technology allows for breathing gases to be delivered at high flow rates while maintaining body temperature and up to 99.9% relative humidity<sup>3</sup>.

The standard nasal cannula has been the standby for better compliance and patient comfort. Cannulae provide supplemental oxygen, are comfortable for long periods and allow patients to eat and talk without interruption of the therapy. However, higher flows (over 2 lpm in neonates or 6 lpm in adults) needed to meet inspiratory requirements without allowing entrainment of room air are not possible with conventional nasal cannula therapy. This limitation to conventional cannula therapy is a result of the discomfort and irritation caused by delivering cold, dry gas to the nasal passages<sup>1,2</sup>. Vapotherm's technology has transformed conventional cannula therapy through optimal conditioning of breathing gas. Proprietary heating and humidification

### RESPIRATORY PHYSIOLOGY AND ALVEOLAR VENTILATION

In order to understand the mechanisms behind HFT, it is helpful to review some fundamental respiratory physiology. Under normal breathing conditions, approximately 30% of an inspired tidal volume represents anatomical dead space. At the start of an inspiration, this dead space is filled end-expiratory gas remaining from the previous expiration. While this anatomical dead space volume is essential to 1) inspiratory gas warming and humidifying and 2) conducting gas to the thorax and dispersing to lung regions, the contribution of dead-space (end-expiratory gas) to a new breath does impact breathing efficiency.

Vapotherm Nasal Cannulas



In a healthy person, alveolar oxygen concentrations are lower than ambient air and alveolar carbon dioxide concentrations are greater than ambient air. This difference between ambient and alveolar gas is a function of alveolar ventilation as well as blood gas content. Alveolar ventilation differs from the more familiar term minute ventilation as a function of dead space.

**Minute ventilation = tidal volume x respiratory rate**

**Alveolar ventilation = (tidal volume – dead space) x respiratory rate**

Based on the relationship between ventilation parameters, a reduction in dead space volume results in lower minute ventilation required to achieve adequate alveolar ventilation. Therefore, dead space volume directly impacts tidal volume and/or respiratory rate requirements, and thus breathing effort, even in healthy people. In this regard, HFT via cannula can enhance respiratory efficiency by flushing nasopharyngeal anatomical dead space and supporting respiratory work. But first, ideal gas conditioning must be achieved.

### IMPORTANCE OF GAS WARMING AND HUMIDIFICATION

The mucosal tissue of the nasopharyngeal space is designed to warm and humidify breathing gas prior to entering the lower respiratory tract<sup>4</sup>. This is accomplished anatomically by achieving a large surface area to interact with inspiratory gas. As such, exposing the nasopharyngeal tissues to greater than a normal minute ventilation rate flow of gas that is below body temperature and the water vapor saturation point (i.e., below 100% relative humidity) can overload these tissues. Such an overload of the nasopharyngeal tissues results in significant dysfunction, drying and damage to the nasal mucosa<sup>5-8</sup>, which likely also contributes to staphylococcal sepsis<sup>9</sup>. Even at low flows, conventional nasal cannula therapy is uncomfortable and raises numerous patient complaints, particularly related to dry nose and mouth<sup>10</sup>.

*HFT via cannula can enhance respiratory efficiency by flushing nasopharyngeal anatomical dead space and supporting respiratory work. But first, ideal gas conditioning must be achieved.*

### RESPIRATORY SYSTEM

#### Upper respiratory tract

Nasopharynx

Pharynx

Larynx

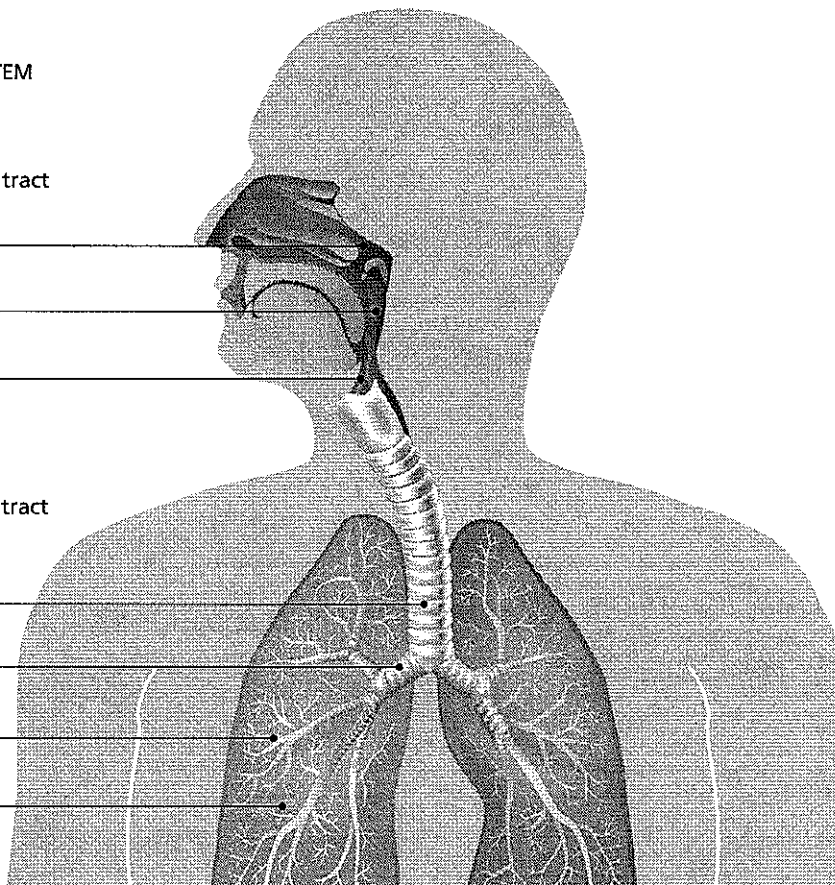
#### Lower respiratory tract

Trachea

Primary bronchi

Bronchioles

Lungs



Ideally, inspiratory gas should be warmed to body temperature (37°C) and humidified to 100% relative humidity<sup>11,12</sup>. Furthermore, humidification with vapor versus aerosolized water is the least likely to cause airway and lung injury by latent heat loss and deposition of water droplets<sup>12</sup>. VapoTherm membrane technology facilitates the passage of water into the breathing gas in a vapor phase, and as demonstrated in a bench test by Waugh and Granger, provides respiratory gases at body temperature and 99.9% relative humidity throughout the designated flow range up to 40 lpm<sup>3</sup>.

### THE TECHNOLOGY BEHIND OPTIMAL GAS CONDITIONING

VapoTherm devices incorporate a patented vapor transfer cartridge system that allows water vapor to diffuse into the respiratory gas stream while heating the gases to the prescribed temperature (typically 37°C). This system is fundamentally different from the conventional heated plate humidifier systems. The VapoTherm devices also employ a triple lumen 'jacketed' delivery tube and proprietary nasal cannulae optimized to maintain temperature and to minimize condensation (rainout). These latter two features protect the state of respiratory gases so that the gas reaches the patient at the same temperature and humidification state that was achieved in the membrane cartridge.

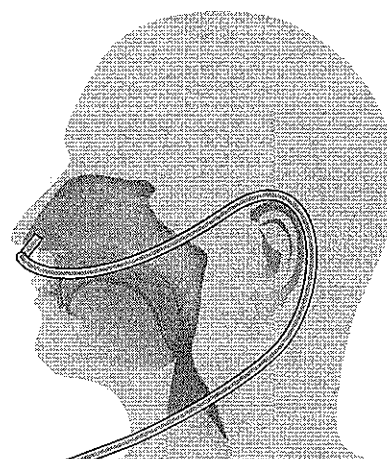
In a randomized crossover study, Woodhead and colleagues evaluated the impact of VapoTherm compared to conventional HFT on the nasal mucosa of preterm infants post extubation<sup>13</sup>. Thirty infants received either VapoTherm or conventional HFT for 24 hours, and then switched to the opposite modality (conventional or VapoTherm) for an additional 24 hrs. Using a blinded scoring system accounting for nasal erythema, edema, thick mucous and hemorrhage ranging from 2 to 10, VapoTherm infants had much better tolerance compared to conventional humidification ( $2.7 \pm 1.2$  vs  $7.8 \pm 1.7$ ;  $p < 0.001$ ).

### HOW DOES HFT IMPACT BREATHING?

Because VapoTherm technology allows respiratory gases to be delivered to the patient truly at body temperature and saturation, high flow is now feasible via nasal cannula. In this regard, HFT is effective because of a number of basic physiologic mechanisms that improve the efficiency of breathing, independent of any specific disease state.

### CO<sub>2</sub> VENTILATION

By supplying flows that exceed patient demand, HFT results in a washout of nasopharyngeal dead space. As with any reduction in anatomical or physiological dead space, this therapy contributes to establishing improved fractions of alveolar gases with respect to carbon dioxide as well as oxygen<sup>14</sup>. Therefore, whereas low flow nasal cannula therapy is only thought to facilitate oxygenation, HFT impacts CO<sub>2</sub> elimination as well.



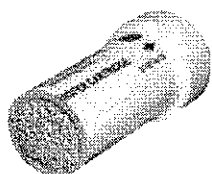
Flushing of dead space in the nasopharyngeal cavity helps enhance alveolar ventilation.

### EFFICIENT OXYGENATION

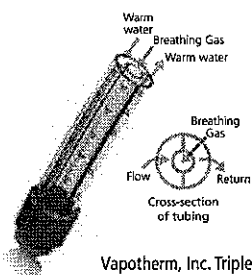
HFT via nasal cannula works under the same principles as HFT through a face mask to achieve high inspired oxygen fractions by eliminating room air entrainment during inspiration. However, because HFT via nasal cannula reduces anatomical dead space by using the nasopharynx as a gas reservoir, it has the potential to improve alveolar oxygen fractions beyond mask therapy based on the equation for alveolar ventilation. Therefore, patients can often maintain better oxygenation or require a lower FiO<sub>2</sub> compared to conventional mask or cannula therapies.

### WORK OF BREATHING

The distensible nature of the nasal mucosa that facilitates physiologic gas condition also results in significant resistance on inspiration efforts relative to expiratory efforts<sup>15</sup>. Because HFT provides enough flow to match or exceed a patient's



VapoTherm, Inc. Vapor Transfer Cartridge cut-away view



VapoTherm, Inc. Triple lumen heated delivery tube cut-away view



inspiratory flow, HFT most likely minimizes the inspiratory resistance associated with the nasopharynx. This change in resistance translates to a change in resistive work of breathing.

In addition, adequate warming and humidification of the conducting airways by delivery of warm, humid gas is associated with improved conductance and pulmonary compliance compared to dry, cooler gas<sup>16</sup>. Furthermore, Fontanari and colleagues showed that receptors in the nasal mucosa respond to cold and dry gas to elicit a protective bronchoconstrictor response in both normal subjects<sup>17</sup> and asthmatics<sup>18</sup>. Therefore, delivery of breathing gases at body temperature and saturation promotes an ideal respiratory mechanical response.

#### ENERGY COST OF GAS CONDITIONING

The nasal air passages expend energy to warm inspiratory air from ambient to 37°C and vaporize water to humidify the incoming air to 100% relative humidity<sup>4,19,20</sup>. Whereas many of the factors involved in this process are unclear or not easily definable, we believe that it can be ascertained that there is some significant energy cost to the process of gas conditioning. This energy cost is alleviated when gas is delivered at body temperature and saturated.

#### RELATIONSHIP BETWEEN FLOW AND PRESSURE

More than fifteen years ago, Dr. Locke and colleagues demonstrated that, even with low flows, positive airway pressure can be inadvertently generated with the use of nasal cannula when the prongs are large relative to the size of the nares<sup>21</sup>. In fact, low flow nasal cannulae have been widely used for CPAP generation in the NICU setting by using relatively large nasal prongs (relative to the nare internal dimensions) and a closed mouth to create up to 8 cmH<sub>2</sub>O of pharyngeal pressure<sup>2</sup>. These historical perspectives have been cause for concern over what nasopharyngeal pressure could be with high flow nasal cannula.

A number of bench and clinical studies have now clarified that the pressure development in the nasopharynx and airways is determined by leak around the nasal prongs and position of the mouth<sup>22-24</sup>. In this regard, when Vapotherm HFT is applied as recommended with nasal prong no larger

than ½ the diameter of the nares with the mouth free to open, pressure generation is at best mild. Dr. Saslow and colleagues at Cooper University Hospital (Camden, NJ) have shown that distending pressures generated by HFT up to 8 lpm in infants was not more than that produced by 6 cmH<sub>2</sub>O of CPAP, and in some cases significantly less (at 5 lpm;  $p = 0.03$ )<sup>25,26</sup>. Dr. Kubicka and colleagues showed that in 27 neonates receiving cannula flows up to 5 lpm, oral pressure never exceeded 5 cmH<sub>2</sub>O<sup>23</sup>. Dr. Wilkinson and colleagues showed that nasopharyngeal pressures were relatively mild in infants during HFT, and predictable when flows were normalized to body weight<sup>24</sup>.

Nonetheless, studies that have evaluated high flow therapy in an effort to develop distending airway pressure with the mouth closed found that typically only mild positive pressures develop<sup>23,27</sup>. Vapotherm devices are not Continuous Positive Airway Pressure devices and are not designed to deliver set pressure. The technology is designed to deliver conditioned gas flows in an open system via simple nasal cannula.

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Title: Initial Ventilator Settings	
Scope: Respiratory Therapists	Department: Respiratory Care
Source: Director of Respiratory Care	Effective Date:

**PURPOSE:**

To provide a starting point when placing an Adult or Pediatric Patient  $\geq$  45 kilograms on a Mechanical Ventilator.

**PROCEDURE:**

Whenever a patient is placed on a mechanical ventilator the following parameters will serve as the **Initial Settings** until the physician writes orders.

## 1. Initial Ventilator Settings

## A. Assist Control

- a. Volume Ventilation may be used for the majority of patients.
- b. Pressure Ventilation should be considered if peak pressures rise over 40 cm H<sub>2</sub>O or plateau pressures rise  $\geq$  30 cm H<sub>2</sub>O.

## B. Tidal Volume

- a. Volume Control—Target 6-8 ml/Kg IBW
- b. Pressure Control—Target 4-6 ml/Kg IBW

## C. Respiratory Rate

- a. Start at a rate of 8-26 breaths / minute. Adjust to achieve optimum total cycle time and maintain desired minute ventilation, while maintaining plateau pressure  $\leq$  30 cm H<sub>2</sub>O

D. Peep of 3-5 cm H<sub>2</sub>OE. FIO<sub>2</sub>: Initial setting of 60-100% until results from arterial blood gases (ABG) can be obtained and the setting adjusted.

- a. Initial ABG should be obtained 20-60 minutes from start of ventilation.
- b. Pulse oximetry should be correlated with initial ABG and the patient subsequently monitored with continuous pulse oximetry to maintain SpO<sub>2</sub> at patient's normal or  $>$  90%.
- c. ET-CO<sub>2</sub> should be correlated with initial ABG and the patient subsequently monitored with continuous ET-CO<sub>2</sub> monitor.

The above settings may need to be adjusted to meet the ventilatory and oxygenation needs of some patients. All patients will be started on Volume Ventilation. However, the RCP may switch to Pressure Ventilation whenever the patient is setup on a ventilator and the resultant plateau pressures are consistently greater than 30 cm H<sub>2</sub>O.

**NORTHERN INYO HOSPITAL  
POLICY AND PROCEDURE**

Title: Initial Ventilator Settings	
Scope: Respiratory Therapists	Department: Respiratory Care
Source: Director of Respiratory Care	Effective Date:

1. Ventilation Targets

a. ABG (Arterial Blood Gas) ranges.

- i. Unless otherwise ordered, the following chart summarizes the arterial blood gas targets for a mechanically ventilated patients:

Patient Category	pH	PaCO <sub>2</sub>	PaO <sub>2</sub>	SaO <sub>2</sub>
Normal	7.35 – 7.45	35-45 mmHg	Greater than or equal to 80 mmHg	92-97%
Chronic Lung Disease	7.30 – 7.45	45-60 mmHg or adjust to pH range	55-75 mmHg	Greater than or equal to 89%
ARDS	7.25 – 7.45	Adjust to pH range	Greater than or equal to 60 mmHg	88-95%

1. Oxygenation Strategies and Tools

a. Indication and Application

- i. Nearly all mechanically ventilated patients will require the application of additional inspired oxygen to meet their targeted oxygen parameters or PaO<sub>2</sub>.

b. Adjustments

- i. As a general rule when it becomes necessary to increase the inspired oxygen amount to greater than 50% in order to meet the patient's oxygen parameters, you may need to consider the additional application of PEEP.

c. Weaning

- i. Oxygen is a drug, therefore when a patient has meet their oxygen parameters, the weaning of oxygen should take precedence over the weaning of any level of PEEP.
- ii. As a general rule, when oxygen is less than or equal to 50% inspired, the subsequent weaning of PEEP may take place.

2. PEEP

a. Indications and Application

- i. PEEP is used for improving oxygenation in patients with refractory hypoxemia.
- ii. For the mechanically ventilated patient it is common to apply a minimum of 5 cmH<sub>2</sub>O of PEEP since the artificial airway bypasses the patients use of physiologic PEEP.
- iii. Some expected outcomes of the application of PEEP.
1. Restored FRC and alveolar recruitment
  2. Decreased shunt
  3. Increased lung compliance
  4. Decreased work of breathing
  5. Increased PaO<sub>2</sub> for a given FiO<sub>2</sub>

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Title: Initial Ventilator Settings	
Scope: Respiratory Therapists	Department: Respiratory Care
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b. Contraindications

i. Some contraindications for the application of PEEP are:

1. Unmanaged bronchopleural fistula
2. Untreated pneumothorax
3. Severe unilateral lung disease
4. Elevated ICP
5. Severe bullous lung disease

ii. Some contraindications are relative at moderate or low levels of PEEP, therefore, the MD should be consulted when these indicators are noted or foreseen

c. Adjustments

i. Adjustments to the level of PEEP can be based on ABG results, or clinical observation.

d. Signs of intolerance

i. Can be seen with increased application of PEEP or at times during weaning of PEEP:

1. Increased WOB
2. Decrease in cardiac output (or decrease in monitored end-tidal carbon dioxide)
3. Decrease in blood pressure
4. Decrease in oxygenation and saturation

e. Weaning

i. The weaning of levels of PEEP should be done judiciously, in increments of 2-3 cm H<sub>2</sub>O over a period of time, while monitoring for signs of intolerance.

ii. The weaning of PEEP usually does not take precedence over the weaning of inspired oxygen.

<b>Committee Approval</b>	<b>Date</b>
Respiratory Care	
Medicine-Intensive Care Committee	
Medical Executive Committee	
NICLHD Board of Directors	

Revised  
Reviewed  
Supercedes

**NORTHERN INYO HOSPITAL  
POLICY AND PROCEDURE**

<b>Title: Circumcision</b>	
<b>Scope:</b>	<b>Department: OB/Gyn</b>
<b>Source: OB Nurse Manager</b>	<b>Effective Date: 6/98</b>

**Purpose:**

To provide guidelines for nursing staff in assisting the physician with infant circumcision and in the care of the infant after completion of the procedure.

**Policy:**

1. Male infants whose parents have requested and signed consent for circumcision may have the procedure performed in the nursery either:
  - a. prior to initial discharge, or
  - b. on an outpatient basis if infant is one month of age or less and the physician has requested that the procedure be performed in the nursery.
2. Perinatal Unit nursing staff or appropriately cross trained nursing staff will assist physicians performing circumcisions in the nursery.

**Special Considerations:**

Physician order IS required.

Procedure may be performed by: RN , LVN

Special education required to perform the procedure: No

Age specific considerations: inherent in procedure

**Equipment:**

1. Baby board with soft straps
2. Bulb syringe
3. Circumcision instrument set
4. Providone-Iodine swab (2-3)
5. Safety Scalpel
6. Gomco clamp
7. Small sterile safety pins ( 2-per MD preference)
8. 1% Lidocaine preservative free amp. (filter needle to draw up)
9. TB syringe with 27-30 gauge needle
10. Vaseline/A&D ointment (per MD preference)
11. Sterile gloves, mask, hat, and gown as requested by physician
12. Surgicel (prn bleeding only)
13. Surgical marking pen
14. Sweet-ease and a pacifier for soothing

**Precautions:**

Prior to starting the procedure make sure:

- a. resuscitation equipment has been checked and is readily available, and
- b. surgical consent is signed
- c. for outpatients: parents have checked in at the outpatient desk, have signed all necessary forms and you have obtained an outpatient number/plate

**Procedure:**

**A. Set-Up/Assist**

1. Place baby on infant board using soft safety restraints. Place a washcloth or cloth diaper under baby's head and a clean diaper under the buttocks.
2. Place bulb syringe within easy reach

**NORTHERN INYO HOSPITAL  
POLICY AND PROCEDURE**

<b>Title: Circumcision</b>	
<b>Scope:</b>	<b>Department: OB/Gyn</b>
<b>Source: OB Nurse Manager</b>	<b>Effective Date: 6/98</b>

3. Place pacifier with sweet-ease in baby's mouth
4. Open sterile equipment
5. Assist the physician as directed with the procedure.

**B. Post circumcision care**

1. Observe penis at least 10 minutes for bleeding (no diaper on)
2. Apply Vaseline ointment (per MD order) to anterior aspect of inner diaper
3. Place the baby in bassinet in a position of comfort (do not place on abdomen) take the baby to mother
4. Check the infant's penis q 1 hour x 4 to observe for bleeding
5. If bleeding occurs at any time, apply Surgicel and notify physician (slight spotting on diaper is OK)
6. Observe for voiding-if infant does not void within 10 hours, notify physician
7. Clean penis 3 x day with soap and water (according to MD order) starting 24 hours after circumcision and apply Vaseline if ordered
8. Notify MD if any unusual drainage, foul odor, increased temperature, excessive swelling or abnormal appearance (slight swelling is expected).

**C. After procedure instructions to parents**

1. Instruct parents to:
  - a. Notify MD for bleeding from penis ("trickles" or "persistent oozing" however, slight spotting on diaper is OK)
  - b. Notify MD if baby has not voided within 10 hours
  - c. Apply Vaseline if ordered
  - e. Call the physician for unusual drainage, foul odor, increased temperature, excessive swelling or abnormal appearance. Slight swelling is to be expected.

**D. Clean up**

1. Place instruments in basin in dirty utility area and clean with Vesta-Syde Solution according to usual procedures
2. Clean circumcision board with disinfectant
3. Wash soft restraints in disinfectant solution and water, rinse and dry

**E. Patient charges:**

1. Check appropriate charges "Circumcision Charges" on charge sheet.

**Documentation**

**Inpatient:** Chart on nursery flowsheet:

- a. physician performing procedure
- b. how infant tolerated procedure
- c. observations of the surgical area after completion of procedure
- d. all teaching done with parents

**Outpatient:** Chart on outpatient chart:

- a. initial assessment and vital signs
- b. all items listed in a-d for inpatient procedure

**Committee approval needed: Peri-Peds 4/12**

**Responsibility: Perinatal Unit Nurse Manager**

**Index listings: Circumcision, Infant**

**Circumcision, Inpatient**

**Circumcision, Outpatient**

**Revised: 6/98; 1/2004, 6/2005, 6/2011lb-jk, 4/12jk**

**NORTHERN INYO HOSPITAL  
POLICY AND PROCEDURE**

Title: <b>Newborn Screening Test</b>	
Scope:	Department: <b>OB/GYN</b>
Source: OB Nurse Manager	Effective Date:

**PURPOSE:**

To screen all neonates for inborn errors of metabolism according to California State regulations.  
To insure all results are obtained and placed in the medical record.

**POLICY:**

1. Newborn screening tests will be performed on all neonates according to the California Newborn Screening Program guidelines, preferably between 12 and 24 hours of age. Newborn screens must be done before 6 days of age if early detection and prevention of disability is to be achieved.
2. NIH staff will provide all patients with a current copy of the program pamphlet "*Important Information for Parents About the Newborn Screening Test*"
3. Newborn screening test will be collected before any red blood cell transfusion. In the event that a transfusion becomes necessary and the specimen is collected before 12 hours of life – collect a second specimen between 24 hours and the 6<sup>th</sup> day of life **if** the hemoglobin and hematocrit are  $\geq$  than 10/30. If the specimen was not collected before the transfusion collect a post transfusion specimen between 24 hours and the 6<sup>th</sup> day of life **if** the hemoglobin and hematocrit are  $\geq$  than 10/30.
4. In cases of early discharge (before 12 hours of age) an initial test will be run and arrangements will be made to return for a second test before six days of age. In addition the nurse will fill out the "Newborn Screening for Babies Leaving the Hospital Prior to 12 Hours of Age" form.
5. Infants not tested or transferred to tertiary care center prior to newborn screening test being done must have documentation on the chart. The nursery nurse (or ward clerk) will be responsible for completing the "Hospital Report of Newborn Screening Specimen Not Obtained (NBS-NO)" and sending it to the State. The nurse caring for the infant will report that the newborn screen was not obtained to the transport team and the receiving facility's nurse taking report on the transferred infant's case. This form will also be filled out for infants not expected to live.
6. Newborn not born at the hospital:
  - a. Admitted within first 6 days – Collect 12 hours prior to 6 days
  - b. Admitted after 6 days but before 30 days of life collect within 48 hours of admission.
7. Critically ill newborns should have testing postponed until the newborn is stable.
8. When parents refuse to have their newborn tested the nurse will:
  - a. Have them read the newborn screening brochure and discuss the importance of early detection and treatment in prevention of disability.

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POLICY AND PROCEDURE**

Title: <b>Newborn Screening Test</b>	
Scope:	Department: <b>OB/GYN</b>
Source: OB Nurse Manager	Effective Date:

- b. If the parent continues to refuse the test, have the parent sign the "Newborn Screening Test Refusal (NBS-TR)" form. Place the original in the infant's chart. One copy is given to the parents and one copy is sent to:

California Department of Health Services  
Newborn Screening Section  
850 Marina Bay Parkway, F175  
Richmond, Ca. 94804

- c. Notify the infant's physician that the parents refused the Newborn Screening and signed the NBS-NO and NBS-TR

9. A newborn not born in hospital but admitted or transferred to the hospital within the first six days of age should have their newborn screen collected as close to discharge as possible. If not discharged by the sixth day, collect on the sixth day.
10. When infant is born at home prior to admission to the hospital the form titled "Notification of Registration of Birth Which Occurred Out of a Licensed Health Facility(NBS-OH)" is filled out and sent to:

California Department of Health Services  
Newborn Screening Section  
850 Marina Bay Parkway, F175  
Richmond, Ca. 94804

- a. Do the newborn screening test according to policy.
11. Test results from the State will be sent to the Perinatal Unit Nurse Manager who will be responsible for assuring they are logged in the Nursery log. The Nurse Manager will monitor for any results not received within 14 days. Reports not received within 14 days will be reported to the Newborn Screening Program by completing a NBS-MR within 5 days of discovery.
12. Repeat test due to inadequate specimens will be done in the nursery at no charge to the patient

**SPECIAL CONSIDERATIONS:**

Physician order not required  
Procedure may be performed by: RN, LVN  
Special education required to perform procedure: **Yes**  
Age specific considerations: Inherent in procedure.

**PRECAUTIONS:**

1. California law (Title, XVII, California Administrative Code) states that all newborns must have a blood specimen taken before discharge from the newborn nursery. This test screens for

**NORTHERN INYO HOSPITAL  
POLICY AND PROCEDURE**

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Scope:	Department: <b>OB/GYN</b>
Source: OB Nurse Manager	Effective Date:

specific diseases in the following groups: Metabolic, Endocrine, Hemoglobin and other genetic diseases. These are all required by law and performed on the same specimen.

2. The infant's heel should be warmed with a warm wet washcloth or diaper prior to testing.
3. The infant should be kept warm, by swaddling during the procedure. Infants should be removed from a radiant warmer during the procedure, as the artificial heat/drying effects of the warmer can alter test results.
4. Use the "tenderfoot" automated heel incisor to assure heel punctures no deeper than 1.0 mm in depth.
5. Avoid use of undue pressure that may cause excessive bruising.

**PROCEDURE:**

1. Complete all information on the "Specimen Collection Form for Newborn Screening Tests".
2. If the mother doesn't have a social security number, fill in the social security number as 999-99-9999.
3. When appropriate, place the MediCal number, BIC (Benefits Identification Card, or PE (Presumptive Eligibility) number or sticker on the Newborn Screening Specimen Collection Form, located in the lower left hand corner of the form's Demographic page.
4. Place the goldenrod copy of the form on a lab report sheet in the infant's chart.
5. Cleanse the warmed heel with an alcohol wipe, wipe dry with a sterile dry gauze sponge and allow to air dry.
6. Gently grasp the infant's foot controlling the foot, but allowing adequate circulation.
7. Use the tenderfoot incision-making devise to puncture an outer aspect of the infant's heel. Use the dry sterile gauze sponge to wipe away the first drop of blood.
8. Coax a large drop of blood from the puncture site. Touch the blood drop, but not the heel to the newborn screening form circle center. Avoid excessive squeezing of the puncture site. Fill all five circles on the card completely from one side of the filter paper. Refer to "Neonatal Screening Blood Specimen Collection and Handling Procedure" for complete review and specific instructions as to location of puncture site and correct collection technique.
9. When procedure is complete, cover the puncture site with a spot Band-Aid and return the infant to the crib.



**NORTHERN INYO HOSPITAL  
POLICY AND PROCEDURE**

<b>Title: Newborn Screening Test</b>	
Scope:	Department: <b>OB/GYN</b>
Source: OB Nurse Manager	Effective Date:

10. Place the specimen Collection Form in the drying rack for ~3 hours or until completely dry (blood has turned brown). Do not wait and batch specimens for mailing. All specimens should be sent within 12 hours of collecting when possible.
11. Complete the Transport Log sheet. Send the original log sheet and the tests done and dried in the provided envelope. The yellow copy of the Transport Log goes in the manila folder in the Nursery.
12. Enter the date the test was done in the Nursery log.
13. In the event of an inadequate specimen, NBS will notify us to redraw the specimen. They will fax the initial sheet to us with the stated problem. We should contact the patient to have them return to NIH for a repeat draw. This is done in the nursery as an outpatient procedure without an attached charge. The Attending MD is also notified so contact can be made.
14. At times results of testing require further blood work. This will be completed in the laboratory as outpatient testing.

For any questions please call: **Newborn Screening - ASC 96  
CHCC  
Madera, California  
Phone: 559/353-6416  
Fax: 559/353-6403**

**DOCUMENTATION:**

1. As noted above in procedure.
2. All results will be sent to the Perinatal Unit Nurse Manager. The results will be entered in the Nursery Log and then forwarded to the Medical Records Department for posting in the infant's chart.
3. The infant should be charged for "NBS Draw/Handling" and "Newborn Screening" on the charge sheet.

**Committee(s) approval needed: NO**

**Responsibility for review and maintenance:** Perinatal Unit Nurse Manager

**Index Listings:** Newborn Screening Test

**Revised:** 6/92; 11/97; 06/01, 09/08, 11/08jk, 9/2010jk, 2/2012jk

Approval	Date

Revised:  
Reviewed:

**NORTHERN INYO HOSPITAL  
POLICY AND PROCEDURE**

Title: BiliChek Transcutaneous Bilirubin Testing	
Scope:	Department: <b>OB/Gyn</b>
Source: Perinatal Nurse Manager	Effective Date: 6/2003

**Purpose:**

To identify infant's with hyperbilirubinemia. Transcutaneous assessment of bilirubin levels in the neonate reduces the need for blood sampling procedures.

**Policy:**

All infants should have a biliscan prior to discharge.

All infants should be assessed for jaundice every shift and a biliscan performed within 24 hours of age for:

- Infants with documented ABO incompatibility.
- Infants with documented Rh sensitivity
- Infants with delayed meconium passage (> 12-24 hours)
- Infants with significant birth trauma or bruising, such as cephalohematoma.
- Less than 37 weeks gestation or low birth weight
- Positive Coombs

Biliscan should be performed at any age if clinically jaundiced.

**Procedure:**

- Following manufacturer's attached instructions (13.1) Perform Calibration.
- Following manufacturer's attached instructions (13.2) Perform Patient Test on forehead
- Prior to calling the MD with results go to "Up to Date". Search *hyperbilirubinemia calculator*. Enter the hours of age, if there are maternal clinical risk factors and the results of the scan in the calculator.
- If the results fall into "greater than 75% or phototherapy recommended" range, staff should have a neonatal n-bili blood level drawn. Then that level can be run on the calculator to evaluate the need for phototherapy. If the n-bili level is the "phototherapy recommended" range notify the MD for orders.
- Outpatient testing after discharge: For any infant with a biliscan greater than 13 (unless a decrease from a previous level) get n-bili levels then using above procedure call MD results.
- Have the infant chart available when calling the MD

**Documentation:**

Document the results, the recommendation of the "up to date" calculator and patient tolerance in the patient medical record. Charge per policy

**Can be performed by:** Perinatal Staff and Cross-Trained Staff (RN and LVN) who have completed yearly competency

**Committee approval needed:** Peri Peds Committee

**Responsibility:** Perinatal Nurse Manager

**Index Listings:** BiliChek, use of; Use of the BiliChek

**Revised:** 06/2003, 10/10jk, 11/11jk, 2/12jk, 4/2012jk

**NORTHERN INYO HOSPITAL  
POLICY AND PROCEDURE**

Title: Influenza Vaccination Policy	
Scope: Hospital Wide	Department: Employee Health
Source: Employee Health/Infection Control	Effective Date:

**PURPOSE:**

Science clearly supports influenza vaccination for healthcare personnel (HCP).

1. To reduce the risk of influenza illness to health care personnel and their friends/family.
2. To prevent transmission of influenza from personnel to persons at high risk for complications. Higher influenza vaccination coverage among HCP is associated with reductions in nosocomial influenza among hospital patients.
3. To reduce personnel absenteeism during community outbreaks.

**POLICY:**

Free influenza vaccinations will be offered from the time they become available in September or October until March 31<sup>st</sup> of the following year.

Data will be collected to determine rates of vaccinations and declinations.

All efforts will be made to improve our program and thereby improve our rates of vaccinations.

**PROCEDURE:**

1. Northern Inyo Hospital (NIH) requires annual influenza vaccinations for all:
  - a. Employees who receive a direct paycheck from NIH.  
Any employment status (Regular; permanent part-time; per diem; temporary agency employees)
  - b. Licensed Independent Practitioners who work on-site in any of the patient care buildings.
  - c. Travelers.
  - d. Contract workers.
  - e. Volunteers
    - i. Ladies Auxiliary
    - ii. Hospice
  - f. Students/Trainees
2. Education will be provided on hire and annually. Education topics will include:
  - a. Education on the influenza vaccine- the different types offered. Education will involve information on the ingredients; which type is best for specific ages and health concerns.
    - i. Inactivated intramuscular vaccine
    - ii. Live attenuated intranasal vaccine
    - iii. Other types as they become available. At some time we may consider using intradermal and high dose.
  - b. On-going education is also provided related to non-vaccine control and prevention measures. This education is also provided at length through the Aerosolized Transmissible Disease policy. It addresses, among other topics, information on how flu is transmitted; cold and cough etiquette; not coming to work ill; mask protection.

- c. When available, Dr. Johnson, Inyo County Health officer, will continue to be encouraged to give a lecture on influenza prior to the start of vaccinations being offered. A video will be made of his lectures and made available to everyone on the hospital's Intranet site.
- 3. The influenza vaccine is free of charge and offered at all sites. It is available through the Emergency Department 24/7. It is freely accessible to prevent any perceived difficulty.
- 4. NIH strives to improve vaccination rates and see a decrease in declinations.
  - a. Education
    - i. regarding the benefit/risk profile of the vaccination
    - ii. myths and realities- via CDC flyers, posters, e-mails
    - iii. on the seriousness of influenza-especially for high risk populations
  - b. Annual consideration of measures for consequences for those who decline the vaccine.
  - c. Annual plans for promotional activities to increase employee interest and response.
- 5. At this time, our yearly goal will depend on how our rates change adding in all of the LIPs. At this time, early in the 2011-2012 year, the goal is:
  - a. 80% by 2014
  - b. 84% by 2016
  - c. 86% by 2018
  - d. 90% or greater by 2020
- 6. A written description of the methodology for data collection is attached. Contract workers will be tracked separately. Data will also continue to be submitted to the CDPH as required.
- 7. NIH does require a signed declination. Employee Health will collect the declinations, and the reasons for the declinations will be reviewed. This will be done without specifying any individuals. The purpose will be to find any potential trends or areas of concern that can be changed by education or other measures. This collection and review will occur at least annually.
- 8. Our plan is to improve our rates annually. Those rates will go to the Infection Control Committee at the first available meeting after March 31 of each year for review.
- 9. Employee Health will annually provide influenza rate data to those leaders and managers who have a stake in the vaccination rate of the hospital staff and LIPs.
  - a. Infection Control Preventionist/Infection Control Committee
  - b. NIH Administrator
  - c. Director of Nurses
  - d. Nurse Managers
  - e. Department Heads
  - f. Medical Staff via the medical staff office.

Committee Approval	Date

Revised  
 Reviewed  
 Supersedes

**NORTHERN INYO HOSPITAL  
POLICY AND PROCEDURE**

Title:	
Scope: Hospital Wide	Department:
Source: Employee Health	Effective Date: 10/2008

**EMPLOYEE TUBERCULOSIS SURVEILLANCE PROGRAM**

The Tuberculin Skin Test (TST) is a diagnostic aid to detect infection with mycobacterium tuberculosis (M.TB).

A positive reaction to the skin test does not signify the presence of disease.

Absence of, or diminished reaction to PPD does not exclude infection with M.TB; decreased responses to tuberculin may occur during:

- febrile or viral illnesses,
- during corticosteroid or immunosuppressive therapy,
- in face of various illnesses such as Hodgkin's, measles, HIV and others,
- because of a sluggish immune system with advancing age.

**A). INITIAL EXAM**

1. A tuberculin skin test is given to all employees, including those with a history of a (old) BCG vaccination, at time of hiring unless a previously positive reaction can be documented.
2. If a prospective employee has a history of a positive TST, they will complete a Tuberculosis Screening Questionnaire (see attached) and have a screening chest x-ray done as soon as possible. The chest x-ray can be omitted if there is a record of a normal CXR done within 3 months of hiring.
3. If it has been greater than one year since testing, then a Two-Step Mantoux Test will be done.
4. New positive tests, whether considered a "Reaction" or "Conversion," will be referred to the employee's private provider and/or the Health Department.
5. A California Confidential Morbidity Report must be completed for all positive tests and faxed to Inyo County Health Department as directed on the form.
6. Conversions are reported to Human Resources so they can be recorded on the OSHA 300 log.

**B). REPEAT TUBERCULIN SKIN TESTS**

1. The interval for serial TB testing of HCWs is to be a least every 12 months.
2. Tests may be done more often at the request of the employee for reasons not directly linked to his or her position. For example, an employee may need one for childcare or for school.
3. TSTs will be done after any known exposure to a patient with M. TB. There should be a baseline done within 2 weeks of the exposure, if possible, and then repeated in 10-12 weeks after the last known date of exposure.

**C). ADMINISTRATION OF THE TUBERCULIN SKIN TEST**

**NORTHERN INYO HOSPITAL  
POLICY AND PROCEDURE**

Title:	
Scope: Hospital Wide	Department:
Source: Employee Health	Effective Date: 10/2008

1. The standard tuberculin skin test procedure (Mantoux Test) is an intradermal injection of 5 T.U. of PPD, 0.1 ml, on the flexor surface of the forearm.
2. It is of utmost importance that each PPD is administered correctly and only by personnel competent to perform this skin test.
3. If a definite bleb is raised, the test has been done correctly. If no bleb forms, the test should be repeated immediately in the other arm.

**D). TWO STEP MANTOUX TEST PROCEDURE**

“A second TST is not needed if the HCW has a documented TST result from any time during the previous 12 months. If a newly employed HCW has had a documented negative TST result within the previous 12 months, a single TST can be administered in the new setting (Box 1). This additional TST represents the second stage of two-step testing. The second test decreases the possibility that boosting on later testing will lead to incorrect suspicion of transmission of *M. tuberculosis* in the setting.”

A recent TST (performed in < 12 months) is not a contraindication to a subsequent TST unless the test was associated with severe ulceration or anaphylactic shock, which are substantially rare adverse events. Multiple TSTs are safe and do not increase the risk for a false-positive result or a TST conversion in persons without infection with mycobacteria.”

(From Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Health-care settings. MMWR Vol. 54/RR17)

The purpose of the Two Step Mantoux TST is to identify infected individuals, who have not been tested in a year or more, and whose sensitivity may have waned with time. Due to waned sensitivity, these persons may not react to a single tuberculin dose, but may show conversion to a subsequent does. If the second test is given a year after the initial dose, the person may appear to have been infected in the time between the tests, and be treated as a new converter, when this is not the case.

To avoid this misconception, for new employees who do not have a history of a positive TST and have not been tested  $\leq$  1 year, do the following:

1. Give initial PPD
  - a. If positive, no further testing necessary.
  - b. If negative, repeat PPD in one/two weeks.
2. Use results of 2nd test as the person's baseline result and proceed as indicated. If the second test is positive the employee is considered as previously infected and cared for accordingly. This would not be considered a skin test conversion.

**NORTHERN INYO HOSPITAL  
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Title:	
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**Box 1. Indications for two-step tuberculin skin tests (TSTs)**

(From Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Health-care settings. MMWR Vol. 54/RR17)

Situation	Recommended testing
No previous TST result	Two-step baseline TSTs
Previous negative TST result (documented or not) > 12 months before new employment	Two-step TSTs
Previous documented negative TST result < 12 months before new employment	Single TST needed for baseline testing: this test will be the second step
≥ 2 previous documented negative TSTs but most recent > 12 months before new employment	Single TST; two-step testing is not necessary.
Previous documented positive TST result	No TST
Previous undocumented positive TST result	Two-step baseline TST(s)
Previous BCG Vaccination	Two-step baseline TST(s)
Inconclusive TSTs OMIT	Order for the QuantiFERON-TB Gold Test to help define a true positive (see supplement) OMIT

**E). INTERPRETATION OF TUBERCULOSIS SKIN TESTS (TST)**

The interpretation of the TST is based on the California Department of Health Services/California Tuberculosis Controllers Association Joint Guidelines (see attached)

1. The TST results are read between 48 - 72 hours. In the elderly or in persons tested for the first time, reaction may develop slowly and may peak after 72 hours.
2. It is essential that local inflammatory response such as redness or edema is not interpreted as induration.
3. Immediate reactions to the tuberculin test or those occurring within 24 hours, probably indicate sensitivity to the preservative and do not indicate tuberculin infection.
4. A positive reaction is defined as an area of induration, measuring  $\geq 10$  for HCWs who have no other risk factors.
5. A positive reaction demonstrates past or recent infection with M.TB; the larger the reaction, the greater the probability that the organism is M.TB.
7. Documented recent infection (within past 2 years) is considered a "conversion", whereas infection which cannot be documented to have occurred within that time is rated as a "reaction".

**NORTHERN INYO HOSPITAL  
POLICY AND PROCEDURE**

Title:	
Scope: Hospital Wide	Department:
Source: Employee Health	Effective Date: 10/2008

8. Converters: if testing identifies a recent converter (those with an increase of at least <10mm of induration to  $\geq$  10mm within 2 years), those individuals are presumed to have recent infection and are at a higher risk of progression from LTBI to active TB.
9. A questionable induration may be the result of an incorrectly performed test and should be repeated in 1-2 weeks.
10. An induration of 5-10 mm may be:
  - a. a cross-reaction to other mycobacteria (not tuberculosis). A repeat should be given in 1-2 weeks. A second reaction of equal size should be dismissed as cross-reaction.
  - b. may be considered positive for HCW who has had recent contact with persons with active TB or is severely immunosuppressed.
9. Test results are never recorded as positive or negative, but in mm of induration present.

**F). TREATMENT**

1. Employees who have reactions or conversions will be referred to his/her private health care provider and the Inyo County Health Department. The employee will be given information on latent tuberculosis, a copy of the TST, and a copy of the CXR report to take to the local provider.
2. Symptoms suggestive of active disease (i.e., chronic cough, hemoptysis, night sweats, weight loss, unexplained fatigue) must be immediately investigated by the Employee Health RN or the Infection Control RN in conjunction with the Emergency Room physician. The employee's private health care provider and Inyo County Health Department may also be involved in the evaluation.

**G). CONTACT INVESTIGATION:** To be done by Inyo County Health Department.

**H). CHEST X-RAYS**

1. Yearly chest x-rays will not be repeated for HCWs known to have had a positive TST at Northern Inyo Hospital with a previously negative chest x-ray.
2. However, new, prospective employees with a history of a positive TST will have the pre-employment physical, a Tuberculosis Screening Questionnaire to assess risk, and a chest x-ray.
3. Chest x-rays will be done on employees with a positive TST, conversion or reaction, who previously have not had a chest x-ray.



**NORTHERN INYO HOSPITAL  
POLICY AND PROCEDURE**

Title:	
Scope: Hospital Wide	Department:
Source: Employee Health	Effective Date: 10/2008

**D). WORK RESTRICTIONS**

1. There is no restriction on employment for healthy personnel with a positive skin test, with or without treatment.
2. HCWs receiving treatment for LTBI can return to work immediately. HCWs with LTBI who cannot take or do not accept a full course of treatment for LTBI should not be excluded from the workplace. They should be counseled regarding the risk for developing TB disease and instructed to report any TB symptoms immediately to Employee Health and/or Infection Control Departments and to their primary care provider.
3. Removal from work is indicated for individuals with indications of active disease, such as those employees who have symptoms and/or a CXR suspicious for active Tuberculosis.
4. Individuals with active disease may return to work if the following criteria are met:
  - a. three consecutive sputum samples collected in 8-24 hour intervals that are negative, with at least one sample from an early morning specimen (because respiratory secretions pool overnight).
  - b. the HCW has responded to antituberculosis treatment that will probably be effective (can be based on susceptibility results).
  - c. The HCW is determined to be noninfectious by a physician knowledgeable and experienced in managing TB disease.

**J). RESPONSIBILITY OF TREATMENT**

1. Follow up and treatment of reactors/converters is to be managed by the employee's personal physician.
2. If infection occurred as a result of employment at Northern Inyo Hospital, or if it is suspected that the infection occurred as a result, Workman's Compensation will be responsible for expenses.

**K). QuantiFERON-TB Gold test results-OMIT ALL REFERENCES TO IGRAs**

1. QFT-G is a blood assay test for tuberculosis infection. The interpretation of this test is less subjective than the TST. This test is not routinely used for screening because of the lack of availability.
2. However, in some cases of inconclusive TSTs (borderline results in those employees without any risk factors), it can be ordered. The HCW will need to travel out of town to get the test done, if they so choose. If the HCW chooses not to get the test done, then recommendations will be based on the TST. Reimbursement will be given for time, travel, and the cost of the test.

**Box 2. Interpretation of QuantiFERON-TB Gold Test (QFT-G) results:**

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POLICY AND PROCEDURE**

<b>Title:</b>	
<b>Scope:</b> Hospital Wide	<b>Department:</b>
<b>Source:</b> Employee Health	<b>Effective Date:</b> 10/2008

QFT-G result	Interpretation
Positive	<i>M. tuberculosis</i> infection probable
Negative	<i>M. tuberculosis</i> infection unlikely, but cannot be excluded, especially when: 1. any illness consistent with TB disease 2. the likelihood of progression to TB disease is increased (e.g., because of immunosuppression)
Indeterminate	Test not interpretable

**References:**

Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Health-Care Settings, 2005, published by CDC.

Title XXII, California Health and Safety Code

**Definition of a positive tuberculin skin test**

The definition of a positive tuberculin skin test depends on a person's prior probability of having LTBI and the person's risk of developing active TB.

**≥ 5 mm of induration\***

- Persons known or suspected to have HIV infection.
- Recent contacts to an active case of pulmonary or laryngeal TB.
- Persons with fibrotic changes seen on chest radiograph consistent with TB.
- Immunosuppressed individuals (See page 7 **Targeted TB Testing/Chronic Immunosuppression**)

**≥ 10 mm of induction**

- All persons except those in above

*NOTE: The CDC recommends using a 15 mm cutoff for low risk reactors. However, in California, this cutoff is not recognized because California is a high incidence state and the prevalence of nontuberculous mycobacterial infections is lower than in other regions of the United States.*

**Tuberculin skin test conversion**

TST conversion is defined as an increase of at least 10 mm induration from < 10 mm to ≥ 10 mm within two years.

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Title:	
Scope: Hospital Wide	Department:
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**Example:** a TST of 4 mm that increases in size to 14 mm or more induration within 2 years would be an example of skin test conversion.

In many cases, the exact size (in mm) of the previous tuberculin skin test may not be known. In such cases, skin test conversion is defined as a change from a negative to positive tuberculin skin test within a 2-year period.

Above is taken from the "California Department of Health Services/California Tuberculosis Controllers Association Joint Guidelines."

**Committee(s) approval needed:**  Yes (per Title 22)  
Infection Control Committee: 10/09  
Executive Committee

**Responsibility for review and maintenance:** Infection Surveillance Nurse/Employee Health Nurse  
**Index Listings:** Employee Tuberculosis Surveillance Program  
**Revised:** 2/94, 6/97; 7/2000; 12/2002; 7/2005, 3/2006,2/2007,1/2008, 10/09  
**Reviewed:** 5/2011; 8/11LA;

**NORTHERN INYO HOSPITAL  
POLICY AND PROCEDURE**

Title: <i>Bloodborne Pathogens</i>	
Scope: Hospital Wide	Department:
Source: Employee Health	Effective Date: 02/2010

**OVERVIEW**

The goal of this exposure control plan is to minimize or eliminate health care worker exposure to bloodborne pathogens. This plan focuses on safer work practices, personal protective equipment, and engineering and administrative controls. Adhering to this plan ensures compliance with all applicable laws and regulations relating to bloodborne pathogens exposure, and is in accordance with Cal/OSHA's Bloodborne Pathogens Standard (Title 8, California Code of Regulations, Section 5193). This plan continues our commitment to providing a safe and healthy environment in which to deliver patient care.

**POLICY**

This policy and procedure will be followed by all employees and physicians working within this facility who may be potentially exposed to bloodborne pathogens. Failure to follow these procedures may result in disciplinary actions. This policy refers to information found in Policy Manager. The specific chapters referred to throughout this policy are found under the area named "The Orange Infection Control Manual," abbreviated as "OICM."

**DEFINITIONS**

**Bloodborne pathogens** – Pathogenic microorganisms that may be present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV), hepatitis C virus (HCV) and human immunodeficiency virus (HIV).

**Contaminated** – The presence or the reasonably anticipated presence of blood or other potentially infectious materials on a surface or in or on an item.

**Decontamination** – The use of physical or chemical means to remove, inactivate or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use or disposal.

**Engineering controls** – Controls such as sharps disposal containers, needleless systems and sharps with engineered sharps injury protection that isolate or remove the bloodborne pathogens hazard from the workplace.

**Engineered sharps injury protection** – A physical attribute built into a needle device used for withdrawing OPIM, accessing a vein or artery, or administering medications or other fluids, which effectively reduces the risk of an exposure incident by a mechanism such as barrier creation, blunting, encapsulation, withdrawal or other effective mechanisms; or a physical attribute built into any other type of needle device, or into a nonneedle sharp, which effectively reduces the risk of an exposure incident.

**Exposure incident** – A specific eye, mouth, or other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that results from the performance of an employee's duties.

**NORTHERN INYO HOSPITAL  
POLICY AND PROCEDURE**

Title:	
Scope: Hospital Wide	Department:
Source: Employee Health	Effective Date: 02/2010

**Occupational exposure** – A job category where skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials could be reasonably anticipated.

**Other potentially infectious materials (OPIM) –**

- Human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any other body fluid that is visibly contaminated with blood such as saliva or vomitus, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids such as in an emergency response
- Any unfixed tissue or organ (other than intact skin) from a human (living or dead)
- Any of the following, if known or reasonably likely to contain or be infected with HIV, HBV or HCV:
  - –Cell, tissue, or organ cultures from humans or experimental animals
  - –Blood, organs or other tissues from experimental animals
  - –Culture medium or other solutions

**Source individual** – Any individual, living or dead, whose blood or OPIM may be a source of occupational exposure to the employee. Examples include, but are not limited to, hospital and clinic patients; clients in institutions for the developmentally disabled; trauma victims; clients of drug and alcohol treatment facilities; residents of hospices and nursing homes; human remains; and individuals who donate or sell blood or blood components.

**Standard precautions** – An approach to infection control. Standard precautions expand the universal precautions concept (*see below*) to include all OPIM with the intent of protecting employees from any disease process that can be spread by contact with a moist body substance. This isolation technique includes substances such as feces, urine, saliva and sputum that were not included in Standard universal precautions unless they contained visible blood.

**Universal precautions** – An approach to infection control, created in 1985 largely in response to the HIV epidemic. Applies blood and body fluid precautions to all persons regardless of their presumed infectious status. Emphasizes the use of barriers to prevent contact with blood and OPIM. Precautions apply to blood, semen, and vaginal secretions; amniotic, cerebrospinal, pericardial, peritoneal, pleural, and synovial fluids; and any other body fluid visibly contaminated with blood.

**EXPOSURE DETERMINATION**

The exposure determination looks at all job classifications to determine the potential for occupational exposure to blood or OPIM. Health care worker job classifications listed below have been determined to be at risk for occupational exposure. This list includes those job classifications in which only some employees have occupational exposure. All elements of this exposure control plan apply to all employees in these jobs.

**NORTHERN INYO HOSPITAL  
POLICY AND PROCEDURE**

Title:	
Scope: Hospital Wide	Department:
Source: Employee Health	Effective Date: 02/2010

- Admission Services
- Biomedical engineers
- Central Supply
- EEG / EKG technicians
- Environmental Services
- Laboratory employees
- Language Services
- Laundry
- Maintenance/Plant Operations
- Nursing- All
- Physical therapists/aides
- Radiology
- Respiratory therapists
- Security
- Social Services

#### **METHODS OF COMPLIANCE**

This section reviews the numerous work practices and procedures necessary to minimize or eliminate unprotected exposure to bloodborne pathogens. Compliance with these practices and procedures is **MANDATORY** and is a condition of employment.

##### **Standard Precautions**

Refer to NIH Policy, "Standard Precautions" in the OICM

Standard precautions are used in all patient care to prevent contact with blood and OPIM. The following body fluids are always treated as if infectious for HBV, HCV or HIV:

- \* Human blood, blood components and products made from human blood
- \* OPIM
  - –semen
  - –vaginal secretions
  - –cerebrospinal fluid
  - –synovial fluid
  - –pleural fluid
  - –pericardial fluid
  - –peritoneal fluid

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Title:	
Scope: Hospital Wide	Department:
Source: Employee Health	Effective Date: 02/2010

- –amniotic fluid
- –any other body fluid contaminated with blood such as saliva or vomitus
- –any unfixed tissue or organ from a human

In circumstances where it is difficult or impossible to differentiate between body fluid types, those fluids are assumed to be potentially infectious.

The Infection Preventionist of Northern Inyo Hospital is responsible for overseeing the use of standard precautions by all health care workers in this setting.

#### Engineering Controls

Engineering controls are used to minimize or eliminate occupational exposures to bloodborne pathogens. These controls include, but are not limited to:

- Sharps with engineering controls, such as needleless systems
- Needle devices and nonneedle sharps
- Handwashing facilities
- Leak proof specimen containers
- Laboratory safety hoods where appropriate

#### Use of Needleless Systems, Needle Devices, Nonneedle Sharps

These devices represent a very effective means of reducing potential staff injuries. The following systems/devices are in place:

The CLAVE CONNECTOR needleless system(s) will be used for:

- Administering fluids or medications
- Any other procedures involving the potential for an exposure incident for which a needleless system is available as an alternative to using a needle device

When a needle or sharp is required, engineered sharps injury protection such as

*\*AUTOGARD / SAF-T-INTIMA IV CATHS*

*\*MONOJECT SAFETY SYRINGES*

*\*VACUTAINER BUTTERFLY / PUNCTURE GUARD / NEEDLE-PRO*

*\*SAFETY TIP NEEDLES*

*\*NEEDLE-PRO BLOOD GAS KIT*

**NORTHERN INYO HOSPITAL  
POLICY AND PROCEDURE**

Title:	
Scope: Hospital Wide	Department:
Source: Employee Health	Effective Date: 02/2010

*\*BLOOD TRANSFER SETS*

*\*TIP PROTECTORS*

*\*EDGE SAFETY DEVICE*

*\*HYPODERMIC NEEDLE-PRO*

*\*SAF-T HOLDER DEVICE*

*\*BAKSNAP SAFETY SYRINGE FOR NUCLEAR MEDICINE*

will be used for:

- Withdrawing OPIM
- Accessing a vein or artery
- Administering medications or fluids
- Any other procedure involving the potential for an exposure incident for which a needle device with engineered sharps injury protection is available.

Nonneedle sharps (e.g., scalpels, lancets) shall have engineered sharps injury protection mechanisms. The following nonneedle safer devices are in use:

*\*TENDERLETT LANCETTS*

*\*DISPOSABLE SCALPELS*

Engineered sharps injury protection devices are *not* required in the following situations *only*:

- An engineering control is not available in the marketplace.
- A licensed health care professional, directly involved in a patient's care, determines in the reasonable exercise of clinical judgment, that the use of the engineering control will jeopardize the patient's safety or the success of a medical or nursing procedure involving the patient. In such cases, the use of this exception shall be investigated and documented by the Infection Preventionist or designee, and must be approved by the NIH Infection Committee.
- The employer can demonstrate by means of objective product evaluation criteria that the engineering control is not more effective in preventing incidents than the alternative used by the employer.
- There is no reliable or specific safety performance information available on the safety performance of the safety control for this facility's procedures. This facility is actively determining whether the use of engineering controls lacking reliable or specific safety performance information will reduce the risk of exposure incidents occurring in this facility.



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Scope: Hospital Wide	Department:
Source: Employee Health	Effective Date: 02/2010

- The use of engineering controls will be re-evaluated annually during the yearly review of this exposure control plan. Additions or deletions will be made at that time or as indicated by ongoing monitoring activities.

Evaluations of effective engineered sharps injury protection devices will follow the *Safer Sharps and Work Practices Evaluation Process*. New devices will be evaluated annually as available, and otherwise as needed.

#### Work Practice Controls

The use of standard precautions is an integral part of this exposure control plan and of Northern Inyo Hospital's infection prevention program. Standard precautions will be practiced whenever exposure to blood or OPIM is anticipated. When differentiation between body fluid type is difficult or impossible, all OPIM will be considered potentially infectious materials.

Work practice controls/procedures have been implemented to minimize exposure to bloodborne pathogens. Each department manager/supervisor is responsible for implementing, evaluating and monitoring compliance with these work practices. Infection Preventionist and safety officers will monitor work practices as part of routine rounds through each area.

Specific infection control policies and procedures are in place to address work practices and procedures centered on the concept of standard precautions. The minimization and elimination of exposure to blood and OPIM is the primary goal.

The following is a summary of work practice controls:

- Hands will be washed with soap and water or alcohol based hand rub (ABHR) before patient contact, after the removal of gloves or other personal protective equipment and immediately following contact or exposure to blood or OPIM. Hands must be washed with soap and water if there is any visible contamination with blood or other fluids.
- Mucous membranes and eyes will be immediately flushed with water following exposure to blood or OPIM.
- Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is reasonable likelihood of occupational exposure (e.g., nurses' station).
- Food, drink and oral medications will not be kept in refrigerators, freezers, shelves, cabinets or on countertops or bench tops where blood or OPIM may be present.
- All procedures involving blood or OPIM will be performed in such a manner as to minimize splashing, spraying, spattering and generation of droplets.
- Mouth pipetting/suctioning of blood or OPIM is prohibited.

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- Specimens of blood or OPIM will be placed in containers that prevent leakage during collection, handling, processing, storage, transportation or shipping. Syringes containing blood or OPIM will not be transported with needles attached unless an engineered safety device is in place permanently shielding the needle.
- The container for storage, transport or shipping to outside of the facility will be labeled or color-coded with the legend "biohazard." These labels shall be fluorescent orange or orange-red, with lettering and symbols in a contrasting color.
- If outside contamination of the primary container occurs, the primary container will be placed within a second container that prevents leakage during handling, processing, storage, transport or shipping and is properly labeled. If specimen could puncture the primary container, the primary container will be placed within the secondary container that is also puncture-resistant.
- Equipment that may be contaminated with blood or OPIM will be decontaminated prior to servicing or shipping. If decontamination is not feasible, a biohazard-warning label (that meets the Cal/OSHA requirements) will be attached to the equipment identifying the contaminated portions. Information will be conveyed to all affected employees, servicing people and/or the manufacturer prior to handling to ensure that appropriate precautions are taken.

**Handling Contaminated Sharps**

All procedures involving the use of sharps in connection with patient care will be performed using the following effective patient-handling techniques and other methods designed to minimize risk of a sharps injury:

- Contaminated needles and syringes, and other sharps will not be bent, broken, recapped or otherwise manipulated and will be disposed of in rigid-walled disposable sharps containers. *Exception:* Syringes that contain radioactive pharmaceuticals may be recapped using a safety device designed for this purpose or by the "one-handed" method. (As of 1/1/2012, radiology has a trial using Baksnap safety syringes that do fit into the nuclear shield)
- Reusable sharps will be placed in labeled, puncture resistant, leak-proof containers for appropriate cleaning and sterilization. Cleaning of such sharps will not require employees to reach their hands into sharps containers.
- Disposable sharps will not be reused under any circumstances.
- Contaminated sharps will be immediately, or as soon as possible after use, disposed of in rigid, puncture-resistant, leak proof containers which are labeled "Sharps Waste" or with the international biohazard symbol and the word "Biohazard."
- Sharps container seals must be leak resistant and difficult to reopen.
- Sharps containers will be readily available and easily accessible for all situations in which sharps are used or can be anticipated to be found, including dietary trays and laundry, if applicable.

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- Sharps containers will be maintained in the upright position and will be replaced when three-fourths full to avoid overfilling.
- Broken glassware that may be contaminated will not be picked up by hand, but by mechanical means such as a brush and dustpan, tongs or forceps.

**Personal Protective Equipment**

*(as specified under each set of precautions in the OICM.)*

Personal protective equipment is an essential component of a plan to reduce or eliminate exposure to bloodborne pathogens. The following policies and procedures will be adhered to:

- Personal protective equipment will be used in conjunction with engineered controls and work practice controls.
- Where the potential for occupational exposure exists, staff will be provided, at no cost to the employee, appropriate personal protective equipment such as gloves, gowns, aprons, laboratory coats, splash goggles, glasses, face shields, masks, mouthpieces, resuscitation bags, pocket masks, hoods, shoe covers, etc.
- Appropriate personal protective equipment will not permit blood or OPIM to pass through (e.g., impervious gowns) or to reach the employee's work clothes, street clothes, undergarments, skin, eyes, mouth or other mucus membranes under normal conditions of use.
- Hypoallergenic gloves, glove liners, powderless gloves, and other similar alternatives will be readily available to those employees who experience allergenic problems with the standard gloves.
- Department managers will insure that personal protective equipment in the appropriate size is readily available and utilized when necessary to provide the needed level of protection from anticipated exposure.
- The Infection Preventionist will monitor compliance by checking use of personal protective equipment as part of the environmental rounds, and department managers will monitor compliance on a day-to-day basis.
- Employees will be provided training on the appropriate use of personal protective equipment. Training will be completed at the time of initial assignment to a job classification or task/procedure that presents the potential for blood, body fluid or other potentially infectious material exposure.
- A staff member may temporarily and briefly decline to use personal protective equipment only under rare and extraordinary circumstances. If he/she believes, based on their own professional judgment, that its use would prevent the delivery of health care or public safety services or would pose an increased hazard to worker safety, then they may decline to use the personal protective equipment. If this occurs, the Infection Preventionist will investigate and document the circumstances to determine whether changes

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should be implemented to prevent a similar occurrence in the future. Northern Inyo Hospital encourages employees to report all such instances.

- Northern Inyo Hospital will be responsible for the cleaning, laundering, repairing, replacing and disposing of personal protective equipment as needed to maintain effectiveness at no cost to the employee.
- Any garment(s) penetrated by blood or OPIM will be removed immediately or as soon as feasible, and placed in the designated area or container for storage until washed or disposed of by the facility.
- All personal protective equipment will be removed prior to leaving the work area.
- Employees are responsible for placing their personal protective equipment, after removal, in a designated area or container for storage, washing, decontamination or disposal.
- Employees will wear gloves when it is reasonably anticipated that they will have hand contact with blood or OPIM, mucous membranes and nonintact skin when performing vascular access procedures, and when handling or coming into contact with contaminated items or surfaces.
- Disposable gloves will be replaced, as soon as practical when contaminated, torn or punctured or when their ability to function as a barrier has been compromised.
- Disposable gloves will not be washed or decontaminated for reuse.
- Heavy duty, utility gloves may be decontaminated for reuse; however, they must be discarded if cracked, peeling, torn or exhibit any signs of deterioration that would compromise their barrier protection.
- Employees will wear masks in combination with eye protective devices such as glasses with solid sidepieces, goggles or face shields whenever splashes, spray, spatter or droplets of blood or OPIM may be generated and eye, nose or mouth contamination can be reasonably anticipated.
- Gowns, aprons, lab coats or similar outer garments will be worn whenever the potential for exposure to blood or OPIM is likely.
- Surgical caps or hoods, and impermeable shoe covers or boots will be worn in instances where "gross contamination" is anticipated (e.g., autopsies, orthopedic surgery, labor and delivery).

**Cleaning and Decontaminating the Work Site**

Listed below are cleaning and decontaminating policies and procedures that must be followed:

- Environmental services is responsible for maintaining the facility in a clean and sanitary manner. Policies and procedures have been developed and implemented to ensure that cleaning is scheduled appropriately and proper methods for cleaning and decontaminating are followed. A written schedule for cleaning and decontaminating the worksite has been developed *AND IS POSTED IN ES WORK STATIONS AND IN THE ES MANUAL*
- All dirty linen is handled in compliance with standard precautions. All appropriate steps are taken to minimize or eliminate potential exposures. If the soiled linen is wet and presents the likelihood of

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causing exposure, a plastic bag will be used to prevent leakage or exposure. (*SECTION 2.pg.12 in the OICM*)

- Linen will be bagged or containerized at the point of use and will not be sorted or rinsed in this location.
- The Infection Control Committee is responsible for reviewing and approving policies and procedures that address proper cleaning, disinfection, and/or sterilization of equipment or environmental surfaces that become contaminated. SECTION 3 OF THE OICM

A summary of cleaning requirements follows:

- All equipment and environmental and work surfaces will be cleaned and decontaminated as soon as possible after contact with blood or OPIM.
- Contaminated work surfaces, or surfaces that come into contact with the hands, will be cleaned and decontaminated immediately or as soon as feasible in the event they become overtly contaminated, when blood or OPIM fluid spills occur, or when procedures are completed, using a disinfectant with a hepatitis B or tuberculocidal claim.
- All bins, pails, cans and similar receptacles that become contaminated with blood or OPIM will be cleaned and decontaminated immediately or as soon as feasible, no later than at the end of the work shift.
- Protective coverings such as plastic wrap, aluminum foil, or imperviously-backed absorbent paper used to cover equipment or environmental surfaces will be removed, replaced and appropriately disposed of at the end of each work shift. If such covering becomes overtly contaminated, it will be removed and disposed of immediately or as soon as feasible.

### **Waste Disposal**

The California Medical Waste Management Act, in conjunction with this plan, will provide direction on the proper disposal of biohazardous waste to include sharps waste and wastes contaminated with blood or OPIM. The following will be placed in red plastic bags marked with the word and symbol for "biohazard" and disposed of using the biohazard waste pathway:

- Liquid or semi-liquid blood or OPIM
- Contaminated items that contain liquid or semi-liquid blood or are caked with dried blood and are capable of releasing these materials when handled or compressed
- Contaminated sharps
- Pathological and microbiological wastes containing blood or OPIM

*Refer to NIH policies for "HANDLING AND DISPOSAL OF NEEDLES/SHARPS" and "HANDLING OF INFECTIOUS WASTE" POLICY" in the OICM.*

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### Hepatitis B Vaccination Program

In an effort to provide maximum protection from hepatitis B infection, Northern Inyo Hospital offers a vaccination program, at no employee cost, to all staff that has potential occupational exposure to bloodborne pathogens. Components of the program are outlined below:

- The vaccination program will be discussed with applicable staff following the training outlined in this plan and within 10 days of initial assignment and annually during the bloodborne pathogens training program. The safety of the vaccine and the advantages of receiving the vaccine will be reviewed with all applicable staff. Details for receiving the vaccine also will be included.
- Vaccine will be provided when indicated by Employee Health as part of the initial employment physical for all new employees with potential exposure to blood or OPIM. Employee Health follows up with each employee until the vaccination series is complete.
- Current employees also will be offered the HBV vaccine free of charge from Employee Health. The vaccine is offered to physicians and other individuals who are not employees (i.e. students, volunteers, contract employees).
- All employees have the right to decline immunization and are required to complete and sign the declination statement. If the employee subsequently changes his/her mind and requests the vaccine, it will be provided at no cost to the employee.

#### Post-Exposure Evaluation and Follow-Up

A bloodborne pathogen exposure prophylaxis protocol has been implemented to provide an immediate, confidential medical evaluation and follow-up of employees exposed to blood or OPIM. This protocol is in accordance with the most recent recommendations of the U.S. Public Health Service.

*Note: The Standard requires providers to follow procedures as recommended by the U.S. Public Health Service. The Centers for Disease Control and Prevention periodically issue new recommendations. Providers, and in particular, medical professionals who conduct post-exposure evaluations, need to keep updated on the CDC's recommendations. Current recommendations and checklists are incorporated into packets and outlined below to ensure comprehensive and appropriate treatment.*

- The protocol and information packets are available from the infection policies and procedures manual. Detailed instructions and all necessary forms are included in the packet for the employee, supervisor and physician, to ensure the evaluation is comprehensive and thorough.
- Medical evaluation, counseling and follow-up will be conducted by the Nursing Supervisor, Emergency Department, and Infection Preventionist, and Employee Health.
- All medical records will be maintained in the patient's confidential employee health file.

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- The treating health care professional will provide to the employee, within 15 days, a copy of his/her written opinion following the post-exposure evaluation and follow-up.
- The Infection Preventionist or Employee Health will advise the employee-patient of the right to refuse consent of post-exposure evaluation and follow-up from his/her health care employer. If consent is refused, a confidential medical evaluation and follow-up will be made immediately available by an outside health care professional. Medical evaluation and laboratory tests will be provided at no cost to the employee.

#### Reporting and Documenting Sharps Injuries

All sharps related injuries will be reported as an occupational injury following the facility's Occupational Injury and Illness Reporting procedure OICM SECTION 4, PG 1 "DEFINITION AND MANAGEMENT OF OCCUPATIONAL EXPOSURE TO BLOODBORNE PATHOGENS. All sharps devices used within the facility will be available and displayed to assist the employee in identifying the device that caused the injury. A report denoting the frequency of use of the types and brands of sharps involved in exposure incidents will be generated and reported to the Safety and Infection Control Committees annually. Frequency of use will be approximated by product ordering trends. All sharps devices used within the facility will be available and displayed to assist the employee in identifying the device that caused the injury.

In addition, all sharps injuries will be recorded on the sharps injury log within 14 working days of the date the incident was reported. The log will be maintained for a minimum of five years by Employee Health.

The log will include the following information

- Job classification of the exposed employee.
- Date and time of the exposure incident.
- Type and brand of the sharp involved, if known.
- A description of the exposure incident which must include:
  - –Job classification of the exposed employee.
  - –Department or work area where the exposure incident occurred.
  - –The procedure the exposed employee was performing at the time of the incident.
  - –How the incident occurred.
  - –The body part involved in the exposure incident.
  - –If the sharp had engineered sharps injury protection, whether the protective mechanism was activated, and whether the injury occurred before the protective mechanism was activated, during activation, or after activation.

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- –If the sharp had no engineered sharps injury protection, the injured employee’s opinion as to whether and how such a mechanism could have prevented the injury.
- –The employee’s opinion about whether any other engineering, administrative or work practice control could have prevented the injury.

**Communicating Hazards to Employees**

In addition to the provisions of standard precautions, the following hazard communication provisions are implemented as part of the exposure control plan:

- Biohazardous waste will be collected in red bags pre-printed with both the word **BIOHAZARD** and the biohazard symbol.
- Warning labels with the legend **BIOHAZARD** will be affixed to refrigerators and freezers containing blood or OPIM, and all other containers used to store, transport or ship blood or OPIM.
- Biohazardous wastes will be labeled with the legend **BIOHAZARDOUS WASTE** or **SHARPS WASTE** as appropriate. Labels shall be fluorescent orange or orange-red, with lettering and symbols in a contrasting color.

The following items *do not* require hazard labels/signs:

- Containers of blood or blood products already labeled as to their contents and released for transfusion or other clinical use.
- Individual containers, tubes and specimen cups of blood or OPIM placed in biohazard labeled bags or containers for storage, transport, shipment or disposal.
- Primary specimen containers, as all staff are trained to use standard precautions when handling patient specimens.
- Laundry bags and containers, as both staff and laundry workers are trained in standard precautions.
- Biohazardous (regulated) waste which has been decontaminated (e.g., processed in a sterilizer) prior to disposal.

**Note:** *The California Medical Waste Management Act also requires hazard-warning signs/labels of biohazardous waste. The requirements of this exposure plan are not intended to supersede these requirements but augment them.*

**Information and Training**

All employees and physicians covered by this plan will be provided training at the time of initial assignment to an at-risk job classification.

Training will be provided by the Infection Preventionist. Training will be provided in the language and vocabulary appropriate to the employee’s education, literacy and language background.



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Training will occur:

- At the time of initial assignment to an at-risk job classification.
- Annually, within 12 months of the previous training.
- When changes affect the employee's occupational exposure, such as new engineering, administrative or work practice controls, modifications of tasks/procedures or institution of new tasks/procedures. This training may be limited to these changes.

The training program will contain, at a minimum, the following elements:

- Copy and explanation of the Standard – A copy of Cal/OSHA's Bloodborne Pathogens Standard is available for review in the Infection Prevention department and this plan.
- Epidemiology and symptoms – A general explanation of the epidemiology and symptoms of bloodborne pathogens.
- Modes of transmission – A general explanation of the modes of transmission of bloodborne pathogens.
- Employer's exposure control plan – An explanation of the plan and how an employee can obtain a copy.
- Risk identification – An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and OPIM.
- Methods of compliance – An explanation of the use and limitations of methods to prevent or reduce exposure, including appropriate engineering controls, administrative or work practice controls, and personal protective equipment.
- Personal protective equipment – Information on the types, proper use, location, removal and an explanation of the basis for selecting personal protective equipment.
- Decontamination and disposal – Information on handling and the decontamination and disposal of personal protective equipment.
- Hepatitis B vaccination – Information on the hepatitis B vaccine, including its efficacy, safety, method of administration, the benefits of being vaccinated, and that it will be offered free of charge.
- Emergencies – Information on the appropriate actions to take and persons to contact in an emergency involving blood or OPIM.
- Exposure incident – An explanation of the procedure to follow if an exposure incident occurs, including how the incident should be reported, the medical follow-up available and the procedure for recording the incident on the sharps injury log.
- Post-exposure evaluation and follow-up – Information on the post-exposure evaluation and follow-up that will be provided to the employee after an exposure incident.
- Signs and labels – An explanation of the signs, labels and/or color coding used to identify hazards.
- Interactive questions and answers – An opportunity for interactive questions and answers with the trainer.

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### Recordkeeping

Records covered in this section are available through Human Resources, Employee Health, and Infection Prevention. Records must be made available under these circumstances:

- All records (training records, medical records and sharps injury log) will be provided upon request to Cal/OSHA and NIOSH for examination and copying.
- Employee training records will be provided upon request to employees and employee representatives.
- Employee medical records will be provided to the subject employee upon request for examination and photocopying. Anyone with written consent from this employee may also request the medical records.
- The sharps injury log is available upon request to examine and photocopy, and will be made available to employees and to employee representatives upon request.
- The sharps injury log will be maintained in by Employee Health for a minimum of five years.

### Medical Records

A medical record for each employee who performs duties that may result in an exposure incident will be maintained by Employee Health. These records will include the following information:

- The name and social security number of the affected employee.
- A copy of the employee's hepatitis B vaccination status including the dates of all hepatitis B vaccinations and any medical records relative to the employee's ability to receive vaccination.
- A copy of all examination and medical testing results, and follow-up procedures.
- The employer's copy of the health care professional's written opinion.
- A copy of the information provided to the health care professional.

These records will be kept confidential and will not be disclosed or reported without the employee's expressed written consent except as required by Title 8, California Code of Regulations, Section 3204, and other applicable laws. These records will be maintained within the above listed departments for at least the duration of employment plus 30 years.

### Training Records

Full documentation of training must be completed for all employees trained. Documentation will be maintained by, and be the responsibility of, department managers and the Infection Preventionist. Documentation will be maintained for a minimum of three years from the date of training and then transferred to permanent storage.

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Training records must include, at a minimum, the following:

- Date of training session
- Summary of content
- Names and job titles of attendees
- Names and qualifications of trainers

#### Annual Review

A review of bloodborne pathogens is conducted each year. This review will be conducted by the Infection Preventionist. Frontline health care workers—those who have contact with patients and use sharps frequently—will be included in this review. As part of the review process, the committee will consider the effectiveness of the program in preventing “exposure incidents” and will include a review of current engineering controls and work practice

The actual CAL/OSHA Standard for Bloodborne Pathogens can be found in the following 3 links:

- Link to Standard 5193 Bloodborne Pathogens:  
<http://www.dir.ca.gov/OSHSB/bloodborne.html>
- Link to Revisions to above (also needs to be included as the 2<sup>nd</sup> link related to a complete bloodborne pathogen standard)  
<http://www.dir.ca.gov/oshsb/bloodpathapprvdtxt.pdf>
- 3<sup>rd</sup> Link related to bloodborne pathogen’s standard:  
[http://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=STANDARDS&p\\_id=10051](http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10051)

**Responsibility for review and maintenance:** Infection Control Practitioner

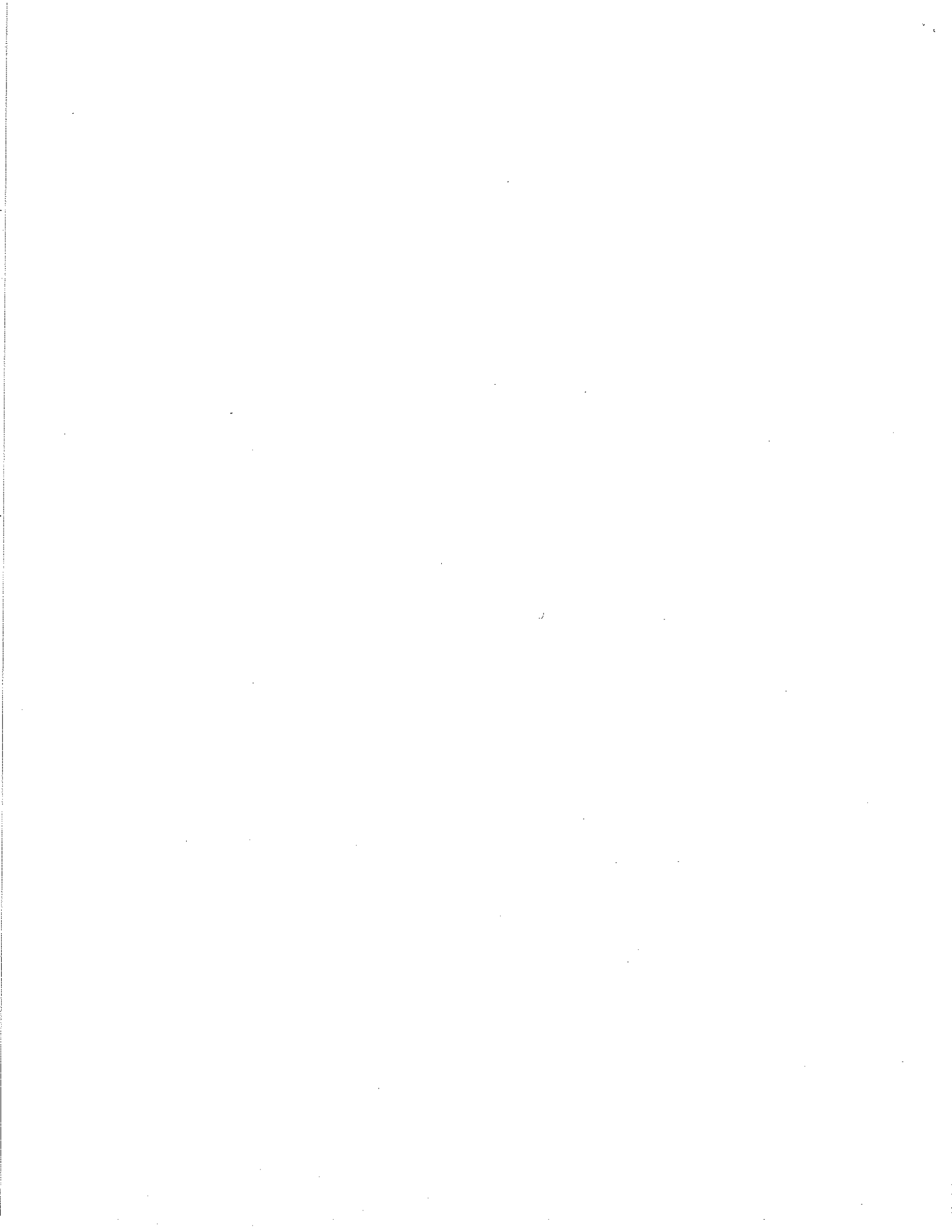
**Index Listings:** Exposure Control Plan

**Revised/Reviewed:** 05/2011; 8/11LA; 2/12LA

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<b>Committee Approval</b>	<b>Date</b>
<b>Infection Control</b>	<b>1/26/10</b>



**NORTHERN INYO HOSPITAL  
PHARMACY & THERAPEUTICS COMMITTEE  
February 17, 2012**

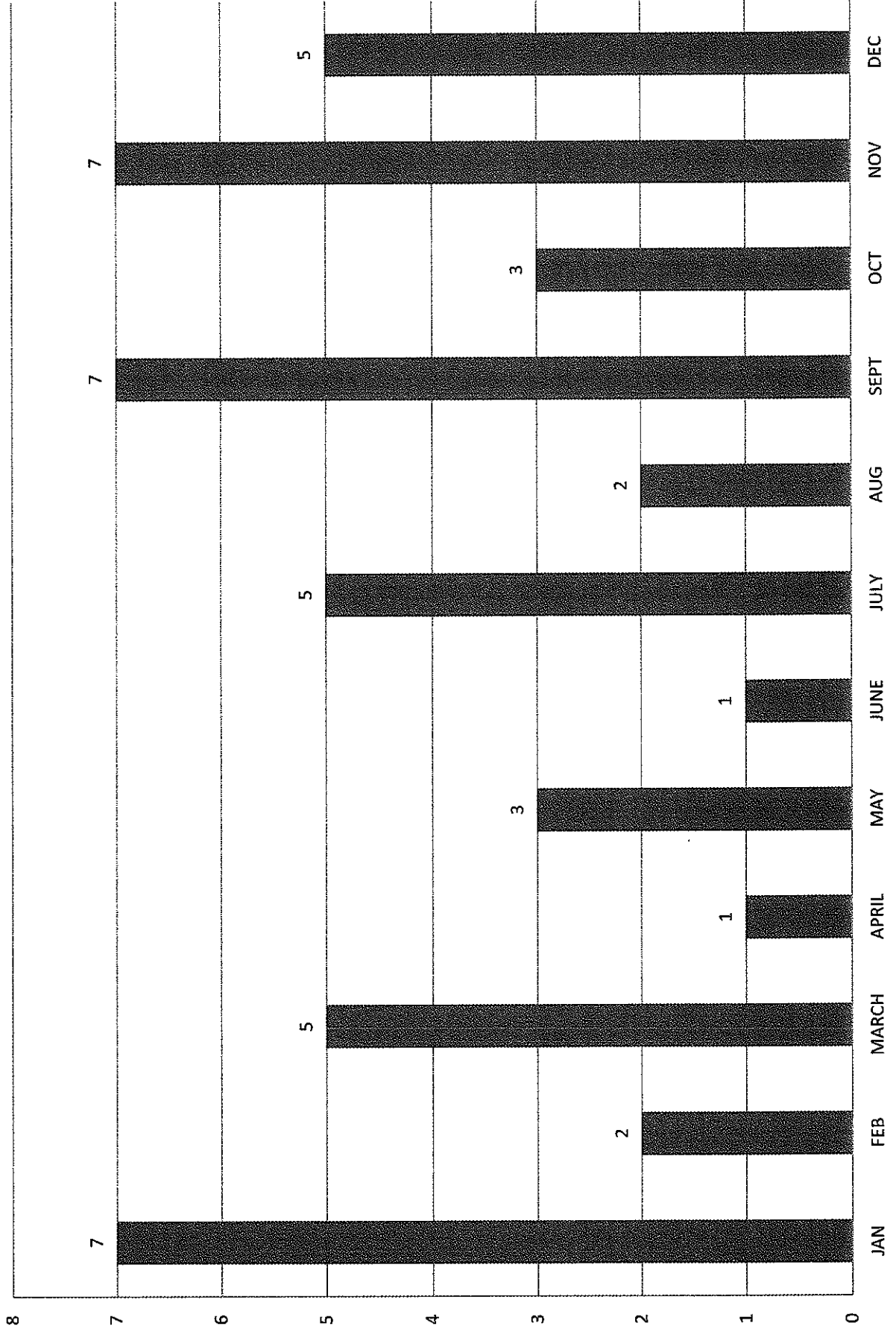
**Adverse Drug Event Report (Year End 2011)**

1. The number of Reported adverse drug events for 2011 was 48. Reporting for 2010 was at 100. For the past 6 years, the level of reporting has been over 90 reports per year.
2. In addition to voluntary reports, drug tracers were used to identify ADE's and they included diphenhydramine, naloxone, flumazaniil, phytonadione, sodium polystyrene sulfonate and colony stimulating drugs.
3. The percentage of events reported as occurring during admission was 71%. This parameter has been about 70% for the last 6 years.
4. Reports of preventable events constituted 6% in 2011, contrasted with 28% of the reports in 2010. This amount is down considerably from the approximately 20% usually seen. This downward trend could be a favorable one, but, cannot be labeled a trend yet.
5. By far the largest category of drugs causing adverse events was opiates with 32 events reported (67% of events), followed by anticoagulants with 4 (8%) and antibiotics with 3 (6%)..
6. There were no trends by type of reaction or severity. The most prevalent reaction reported was itching. The most serious reaction was increased length of stay in one case only. There were no cases of death or permanent disability. No events were reported to the FDA in 2011.

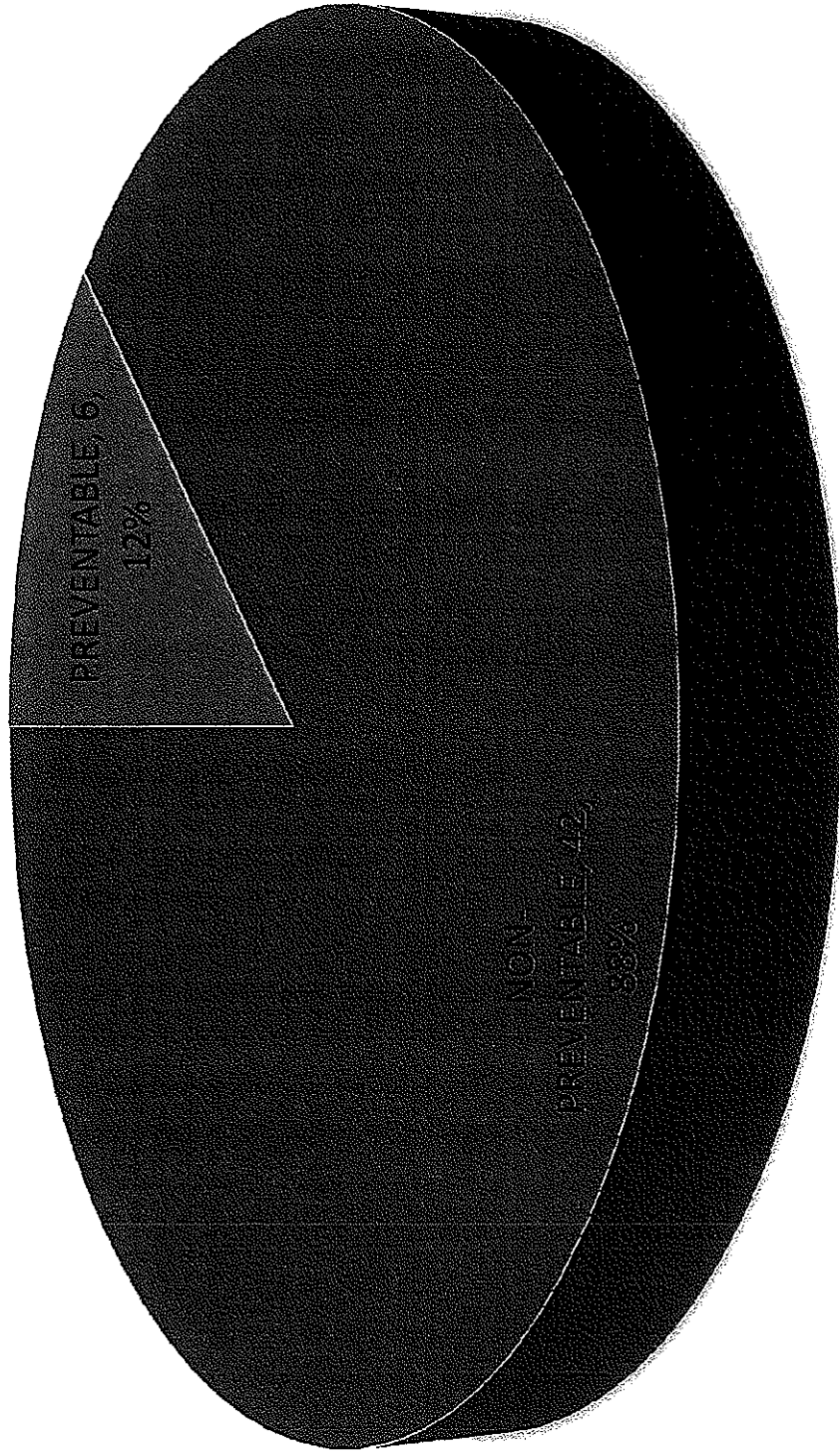
**Actions:**

Continue monitoring ADE's, distribute this report with graphs to the medical staff.

# 2011 #of ADE Reports by Month

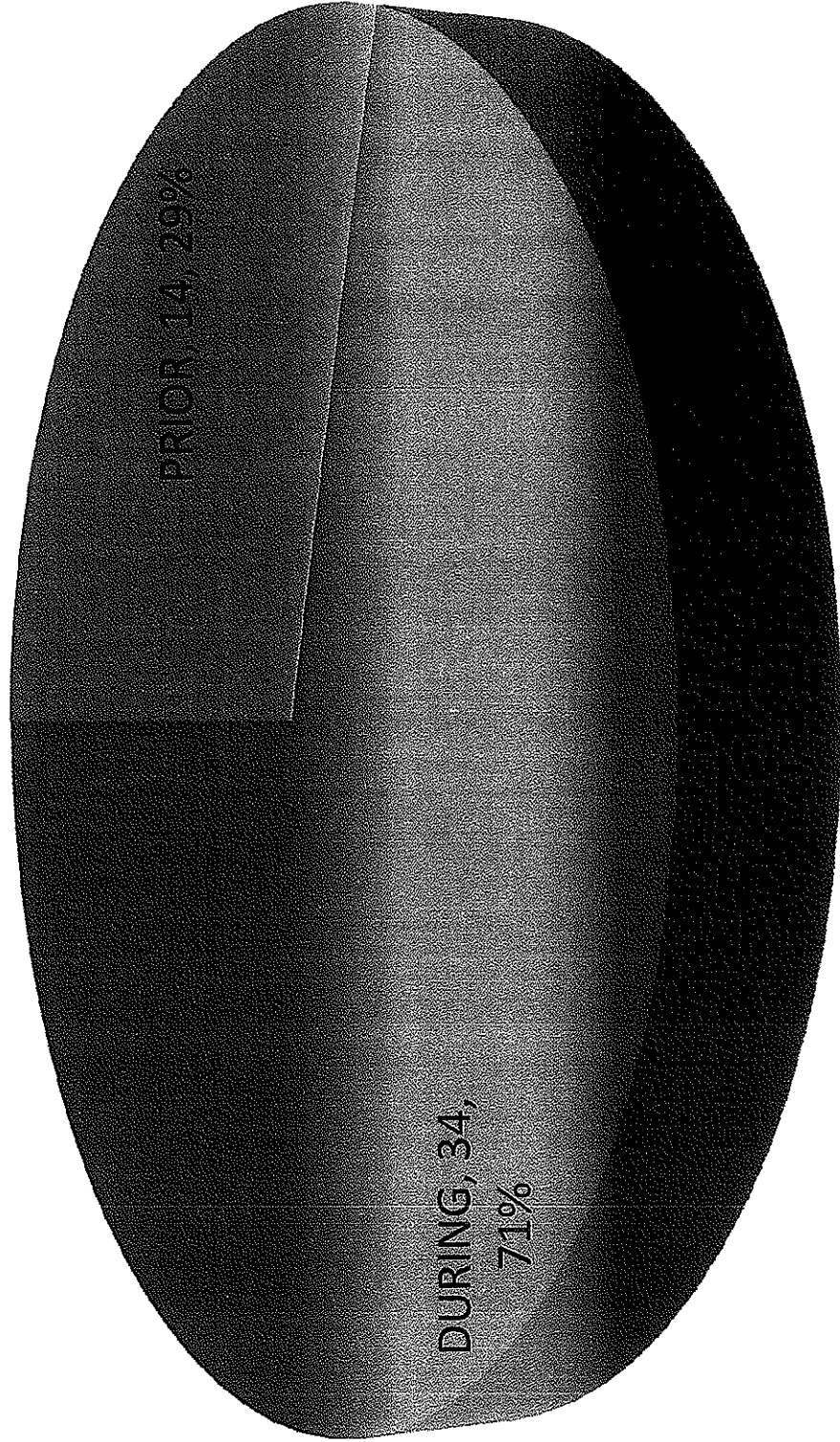


## 2011 Preventable vs. Non-preventable ADEs

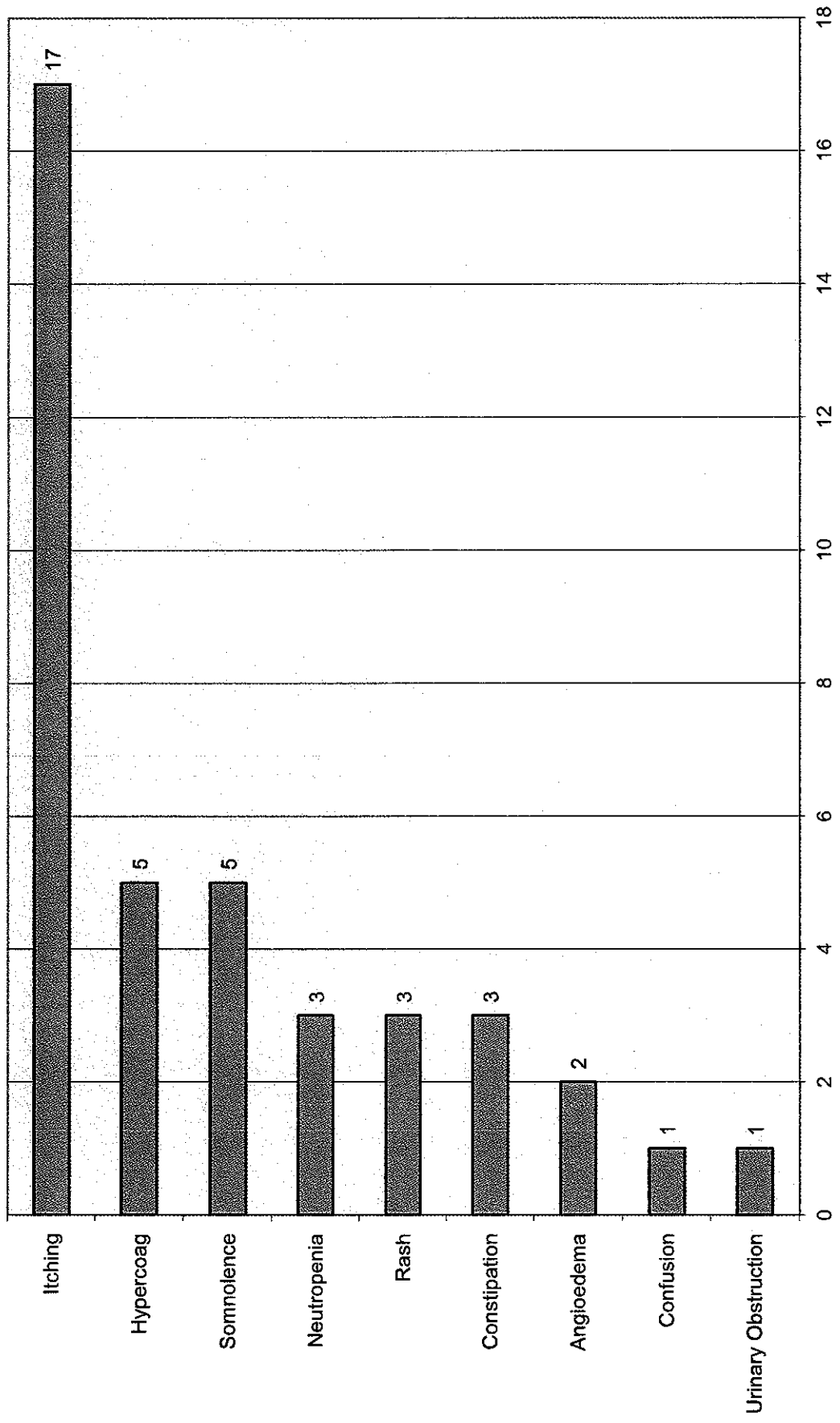




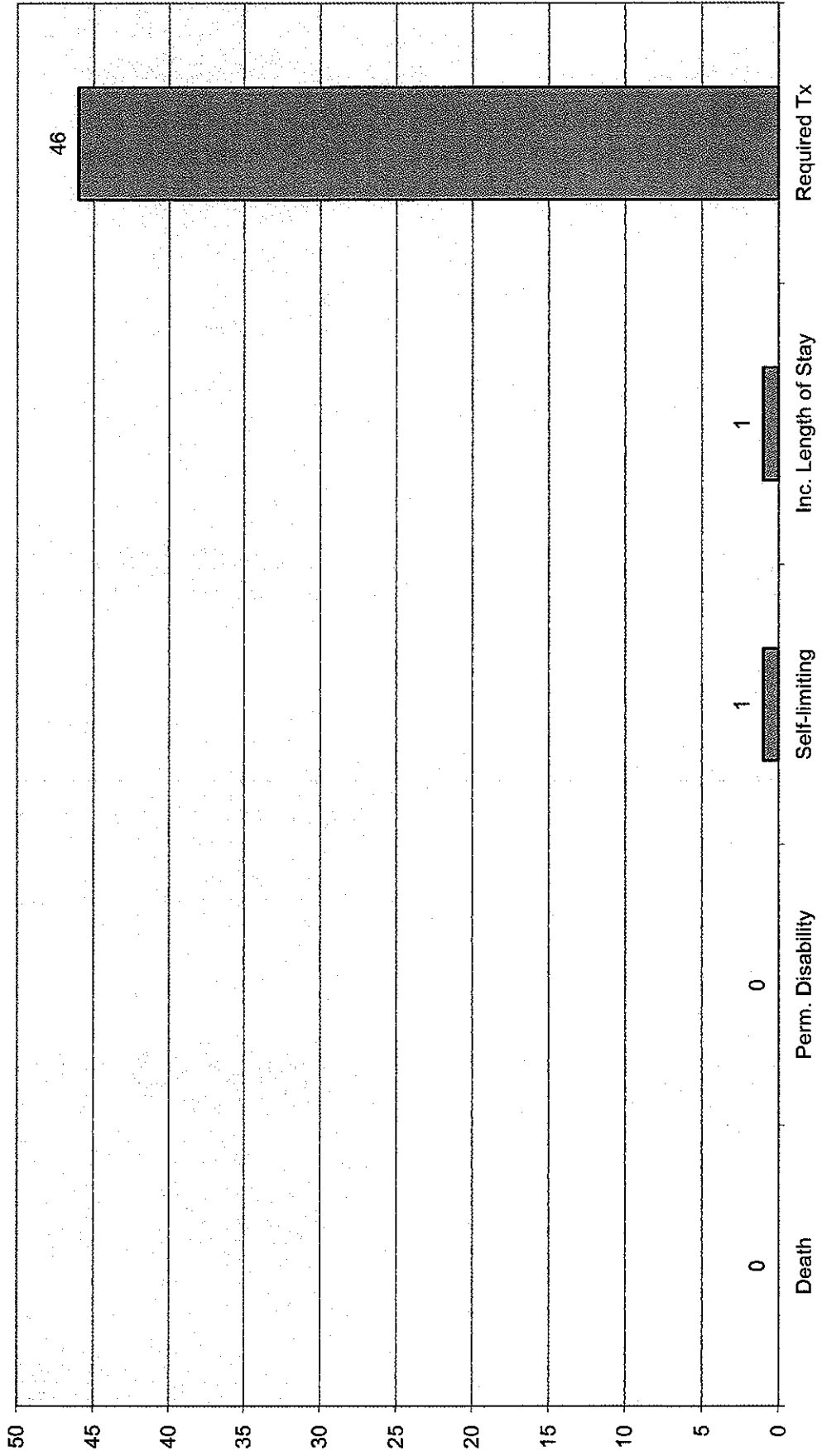
**2011 ADE's Prior to vs During Admissions**



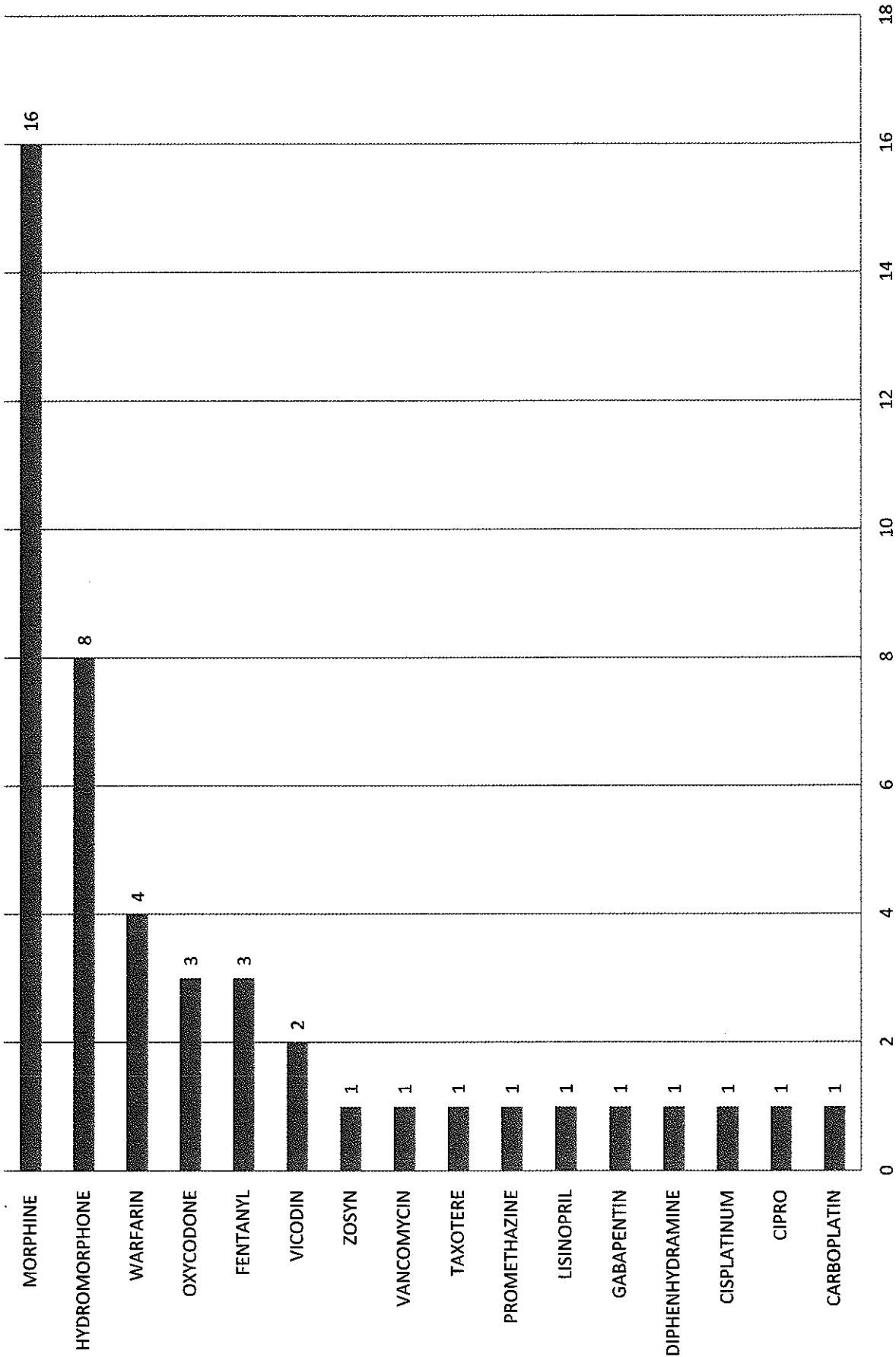
2011 ADE by Type of Reaction



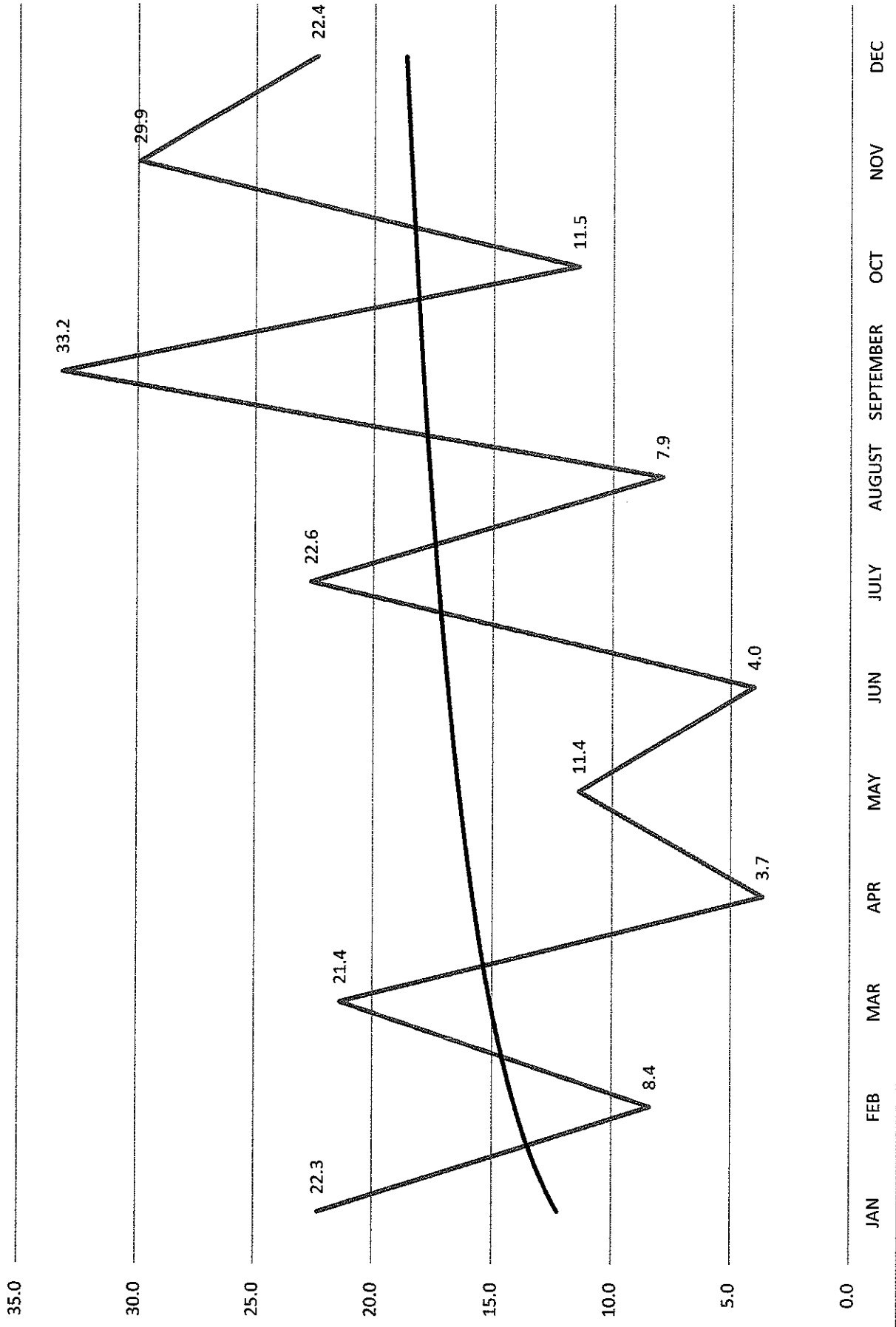
### 2011 ADEs by Severity of Reaction



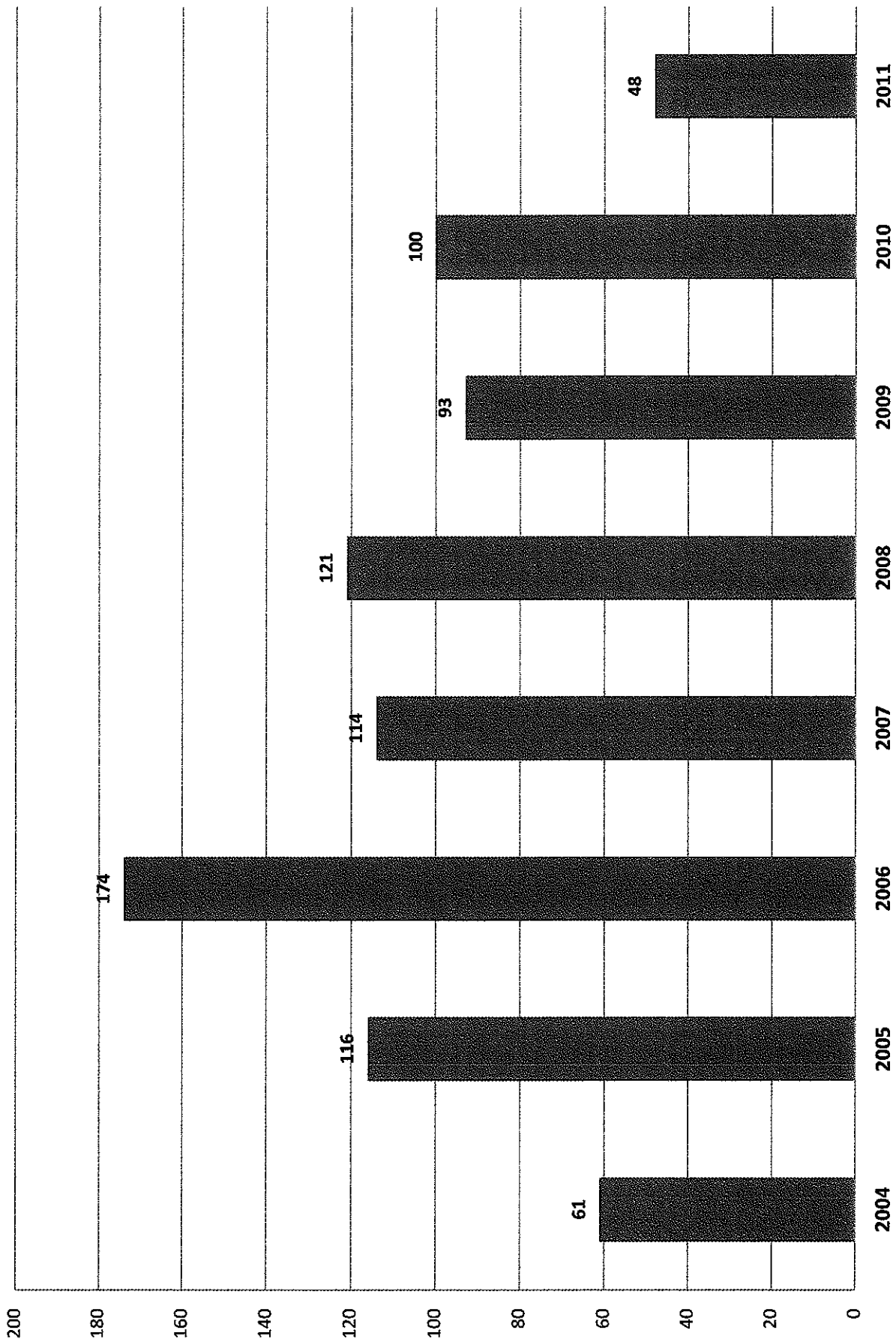
# 2011 ADEs BY DRUG



# 2011 ADEs Per Thousand Patient Days with Log Trend line



# ADE REPORTS BY YEAR



Northern Inyo Hospital  
Pharmacy and Therapeutics Committee  
February 23, 2012

Medication Error Reduction Program  
Annual Report for 2011

Program Description:

1. Prescribing:

- a. Judicious use of Antibiotics were studied and reported in 2010 and found to be acceptable. Follow up assessment was done on 3/29/2011 and remained acceptable.
- b. We reviewed and approved preprinted medication order forms in the P&T Committee on 2/17/2011.
- c. Pharmacist interventions were analyzed for prescribing weaknesses with the last reported analysis done 6/5/11.

2. Prescribing Communication

- a. The hospital analyzed all medication error reports for trends including prescribing communication. No weaknesses were identified in 2011.

3. Product Labeling:

- a. We changed the way we use Oxytocin in OB in 2010 to a 500ml Premix bag with new sticker. Analysis of medication error reports completed in on January 25, 2012 for the 12 months o 2011 showed no errors associated with this product labeling change.
- b. Added a laminated instruction card to the Magnesium Sulfate Premix, outlining the giving of a bolus and drip rates in 2010. Analysis of medication error reports completed on January 25, 2012 for the 12 months of 2011 showed no errors associated with this product labeling change.
- c. We changed the way PCA medications showed in the Omnicell to start with PCA not the name of the drug, reducing errors in finding the right medication. Analysis of medication error reports completed on January 25, 2012 for the 12 months of 2011 showed no errors associated with this product labeling change.

4. Packaging and Nomenclature

- a. On 9/6/2011 we studied the effect of renaming methylprednisolone injection and hydrocortisone injections due to a weakness in the Omnicell nomenclature in the emergency department on 9/7/2010. The analysis of medication errors up to 9/6/2011 showed no errors associated with the nomenclature change.

5. Compounding

- a. We used quality control measures, personnel competency and end-product sampling to insure quality in compounding. Testing completed in 2011 showed no weaknesses in the compounding system.

6. Dispensing

- a. Overrides were decreased throughout 2010 from our action in October 2009. On 6/15/11 Override reasons were changed to indicate "with or without pharmacist authorization". On 1/25/12 we analyzed overrides for 2011 and found that there was a 70% drop in overrides for

the 6 months after the change. Admissions for the 6 months ending June 30, 2011 were 519 compared to 529 for the 6 months ending December 31, 2011.

## 7. Distribution

- a. Physical checks of the accuracy of the ADC inventory was conducted Monthly. No Weaknesses or deficiencies were identified.
- b. Analysis of medication error reports completed on January 25, 2012 for the 12 months of 2011 showed no errors associated with distribution. However two cases of miss-distributed medications were identified through error reports that did not reach the patient. Pharmacy conducted investigations of these two incidents and did not discover how they could have occurred.

## 8. Administration

- a. Administration was studied using two methods: Monthly error analysis and Medication Pass Observation.
- b. With identification of Handoff procedures as a root cause in 15% of all medication errors, a study group was formed of staff nurses late in the year. Their meeting proceedings were reported to MAIC.

## 9. Education

- a. Complete, current and accessible drug information is available for staff through the intranet link to "Up-to-Date."
- b. The standard mix calculator provides readily available dosing charts. The CDPH MERP surveyor suggested that we may not want to utilize this resource because it is not a nationally recognized source and we could face liability if an error occurred related to the Standard Mix Calculator.
- c. We modified warnings and alerts on override medications and on ER Omnicell issuances which warned of potential drug-allergy interactions, safe administration alerts and required that the pharmacist on duty be called for overrides unless an emergency existed.
- d. We provided ISMP alerts to all nursing and pharmacy personnel
- e. Monthly evaluation of medication error reports found no errors related to education or knowledge deficits.

## 10. Monitoring

- a. NIH Pharmacists provided monitoring 24/7 both by being on site 0700 to 1700 daily and all other hours through remote computer connection.
- b. All personnel have access to laboratory data online 24/7 via secure internet portal.
- c. Acetaminophen total daily dose was monitored and interventions were initiated for excess total daily doses..
- d. The pharmacists monitor ANC, creatinine clearance and other appropriate labs for Chemotherapy patients.
- e. The pharmacists monitor renal function and change doses with physician collaboration for patients with renal impairment
- f. Warfarin, Heparin and Enoxaparin monitoring was accomplished and reported to the P&T committee.

## 11. Use

- a. Ongoing monitoring of medication use took place via pharmacist intervention tracking and reporting
- b. Ongoing pain audits for pain medication usage were performed by nursing services



## Program Evaluation:

### General:

1. There were no deaths, permanent harm, or increased lengths of stay attributed to medication errors in 2011.
2. With the tightening of Override privileges and the inclusion of override reasons that include whether or not a pharmacist was consulted, "wrong drug or IV given from stock" errors dropped from 8 in 2010 to 3 in 2011.
3. There is a need to focus on the causes of omissions as these errors are the most common. There were 10 more omissions of a single dose in 2011 (33) than in 2010 (23). There was 1 less multidose omission in 2011 (4) than in 2010 (5).
4. Adverse drug event monitoring has not revealed error as a source of ADE's
5. A major improvement in safety could be realized from the institution of CPOE and of Bar Code Medication Administration. Both of these advances will be realized in Spring of 2012 when the implementation of McKesson Paragon HIS will be complete.

### Prescribing:

- a. Pharmacist interventions have intercepted prescribing errors (see Intervention Reports) throughout 2011.
- b. The number of requests for "dosing by pharmacy" has increased, but the impact on safety has not been studied.

### Prescribing Communication:

- a. While the full time faxing of orders to pharmacy has decreased the risk of misread orders, 3 faxing errors were identified. The errors were failures to fax orders. These errors resulted in 2 IV solutions being continued at higher rates than ordered, and one discontinued drug being given for 1 dose. In addition 3 entry errors were made by the night pharmacist – two were dosing errors, one was a timing error. The 24-hour check system discovered the errors. No patient harm was reported.

### Product Labeling:

- a. We discovered that nursing is good at labeling IV's removed from the Omnicell.
- b. Because we have not identified specific product labels as a source of error in our error monitoring process we had not instituted initiatives in this area in 2011.

### Packaging and Nomenclature:

- a. We have not seen errors related to Packaging and Nomenclature in 2011. No initiatives are recommended from our experience. We will continue to respond to the literature for initiatives in this area.

### Compounding:

- a. We have not discovered compounding risks with our current program. Our compounding is sterile to sterile admixture.

### Dispensing:

- a. Overrides were a focus area in 2011. The institution of night coverage with our own pharmacists in October 2009 resulted in a 50% reduction in overrides in 2010. In 2011, override reasons were changed to require consultation with a pharmacist prior to override, except in a real emergency. The result of this change in June, 2011, was a further reduction in overrides. Overrides are considered a risk per se, as removal of medications without pharmacist processing of orders, by-passes all computerized and human checks for appropriateness of drug selected, dose, drug-allergy, and drug-drug interactions. The program was very effective

as the number of overrides per month decreased steadily from 46.7 per month in the first half of 2010, to 5.7 per month in the last half of 2011.

Distribution:

- a. Our drug distribution system consists of two processes: Automated dispensing cabinets through which 97.9% of all doses were dispensed in 2011 and direct dispensing through which 2.1% of all doses were dispensed in 2011. Direct dispensing was reserved for items that could only be made in pharmacy and for cancer chemo therapy.
- b. The approximately 75000 doses that were dispensed via the automated dispensing cabinets were distributed into approximately 2,600 bins. On average 40 bins are refilled daily with 5 or more doses by pharmacy. The check system used for cabinet refilling is very effective as monthly complete physical inventories have found no miss-filled bins in 2011. Medication occurrence monitoring found 2 bin fill errors out of the approximately 15000 bin fills. Current distribution methods appear to be safe.
- c. No distribution errors were reported in direct dispensed products using current methods.

Administration:

- a. Through monthly analysis of medication error reports, we discovered that omission errors remained the predominant error (35%) in 2011 with 28 out of 92 total errors being single dose omissions, and 4 of the 92 total being multiple dose omission. There were also 16 Underdose/lower IV rate errors as well as 15 Overdose and 8 Underdose/lower IV rate errors. These are grouped together because many of them were the result of weak handoff procedures. Handoff errors made up 22% of omission errors, 17% of Extra Dose/Overdose/Too High IV Rate errors, and 15% of all errors.
- b. Administration errors are constantly studied by the MAIC and reported to the P&T committee. Initiatives and adjustments to practice were instituted. Omission errors are still the highest type of error. More can be done to identify the route causes of this type of error. The switch to Paragon offers continuity of information electronically. This change may help reduce errors caused during handoff.

Education:

- a. The ISMP newsletter is distributed to all nursing and pharmacy staff. No effort was undertaken to assess the readership of this newsletter, but that could be done in 2012 by requiring a read receipt to the email that distributes the newsletters. The ISMP newsletter was a regular agenda item in MAIC 2011. No actions were taken as a result of the newsletter in 2011.
- b. Further initiatives relative to education could be undertaken, specifically using MedCom, our on-line educational program. This was not undertaken in 2011.

Monitoring:

- a. The monitoring practices of the pharmacy at NIH have been successful at preventing errors and improving care as documented by the interventions report. The Intervention report will be renamed to the Pharmaceutical Care report at the behest of the medical staff.
- b. Monitoring of Anticoagulants, Acetaminophen and Antibiotics has been successful and will continue.

Use:

- a. The restudy of newborn administration of erythromycin ophthalmic ointment and phytonadione was not accomplished in 2011. This study should be done in 2012 to evaluate the changes made to processing of these orders.

Northern Inyo Hospital  
Pharmacy and Therapeutics Committee  
February 13, 2012

Pharmaceutical Care Report for 2011

Interactions with physicians for 2011 were documented as follows:

1. One thousand, two hundred, forty-eight (1248) interactions were documented for 2011.
2. Interactions per 1000 patient days were 419.5 over the year, with an average of 3.4 interactions per day.

Interactions are sorted into two categories: Error Prevention and Therapy Improvement.

Error Prevention interactions were sorted into the following categories:

1. Dose/Interval Correction
2. Duplication/Omission (Duplication/Omission)
3. Drug Interaction Prevention (Interaction)
4. Allergy/Order Conflict (Allergy)
5. Medication Reconciliation Record/Order Difference or Order Omission (Med Reconcil)
6. Dosage Adjustment Based Upon Renal Function (Renal Dosing)
7. Drug Name Clarification
8. Lab/Order Problem/Monitoring (Lab Order Prob)
9. Clinical Hold
10. Nurse Teaching

Therapy Improvement interactions were sorted into the following categories:

1. Dose Calculation
2. Therapy Choice
3. Change of antibiotic based upon C&S (Antibiotic Streamlining)
4. Route Selection
5. Aminoglycoside, Vancomycin or Sulfamethoxazole/Trimethoprim Dosing (Amino/Vanco/Bactrim)
6. Pain Consult

The accompanying graphs for Therapy Improvement and Error Prevention show the results for 2011.

Of Therapy Improvement Interactions, 93% consisted of

1. Dose Calculation (153, 30%), this number documented chemotherapy dose calculations for the first time
2. Aminoglycoside and Vancomycin dosing (148, 29%),
3. Therapy Choice (114, 23%) and
4. Antibiotic Streamlining (56, 11%)

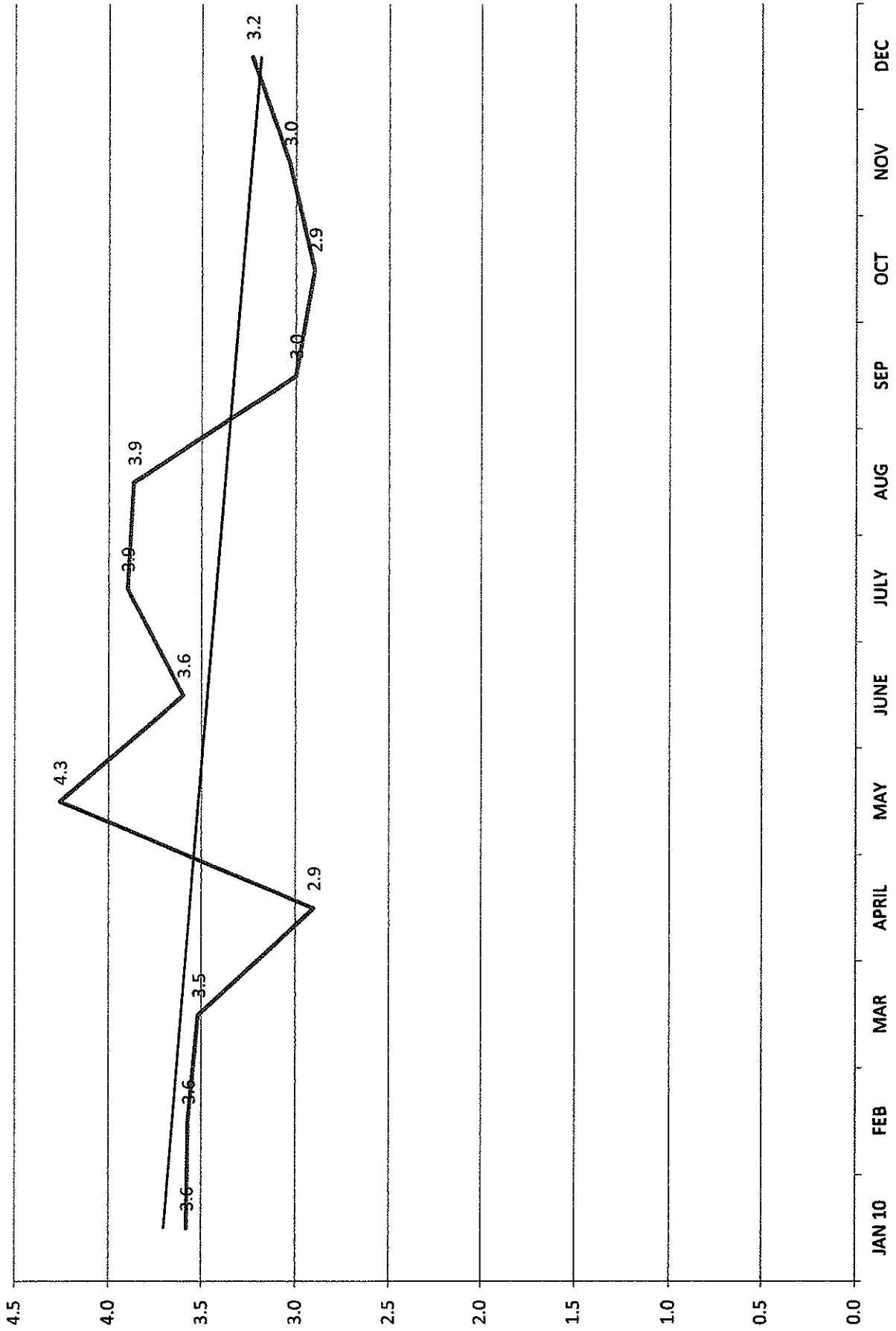
Almost all Therapy Improvement interventions are physician initiated. These interactions are not expected to change with the implementation of Computerized Physician Order Entry (CPOE) and Computerized Medication Reconciliation

Of Medication Error Prevention Monitoring and Interactions, 98% consisted of

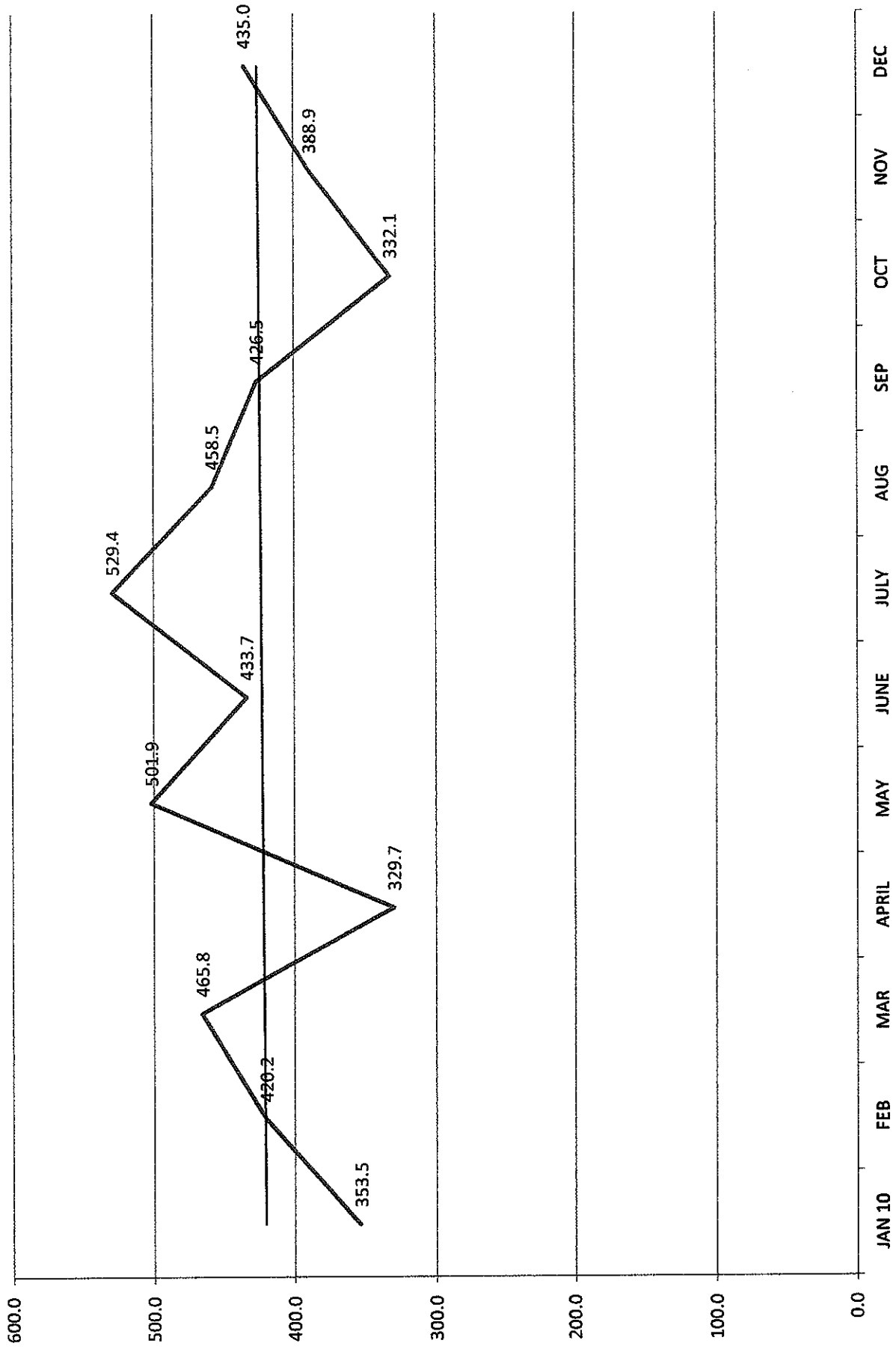
1. Med Reconciliations 486, 67% of which 31 resulted in order changes,
2. Dose/Interval Corrections 114, 16%,
3. Lab-order monitoring 57, 8% resulted in 7 order changes
4. Duplication/Omission Interactions 28, 4%
5. Drug Interaction Communications 21, 3%

The implementation of Computerized Physician Order Entry (CPOE) and Computerized Medication Reconciliation may affect the quality and quantity of the pharmacist interactions of the future. Dose/Interval corrections are expected to decrease with order choices prompting standard dosing.

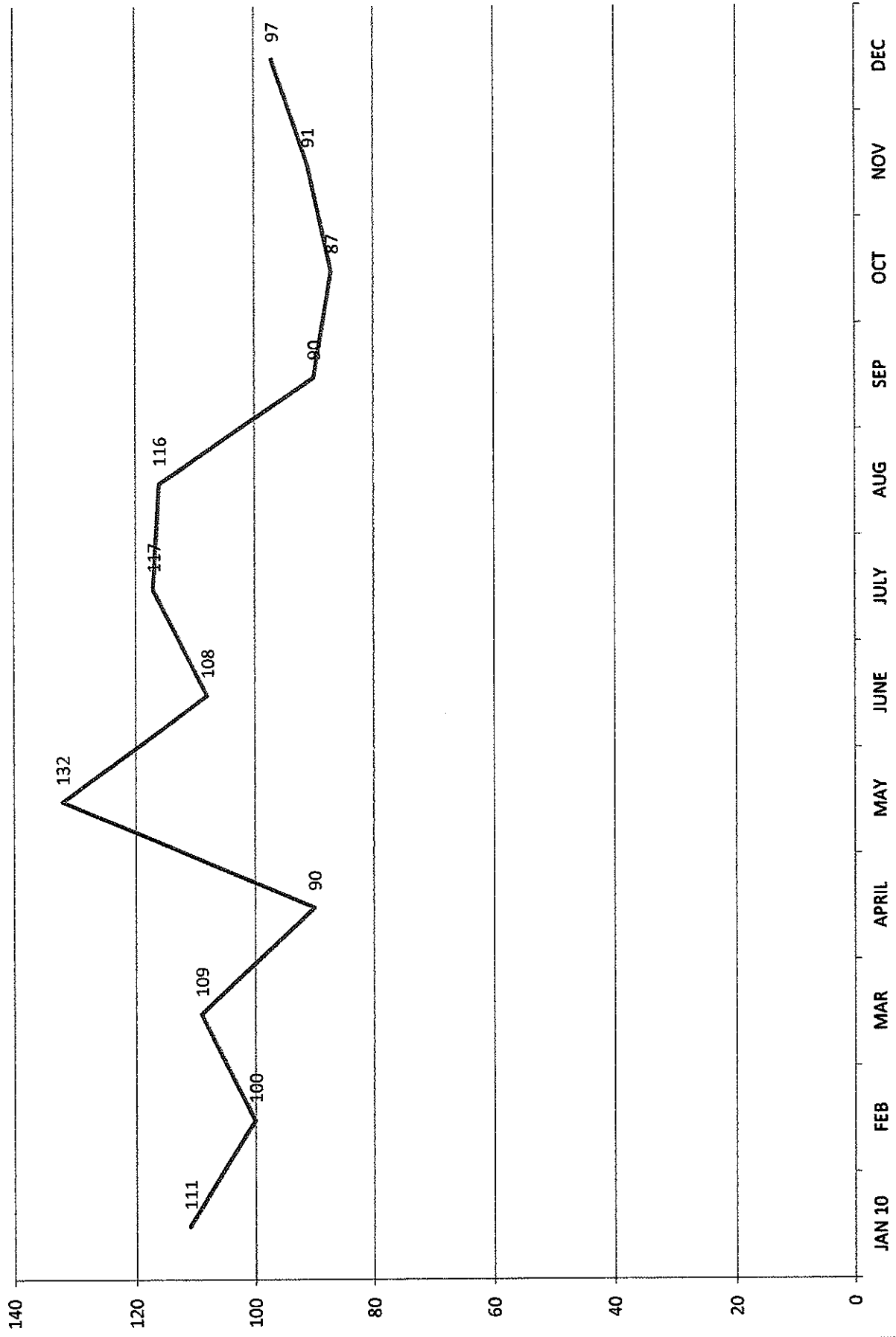
# COLLABORATIONS PER DAY BY MONTH 2011



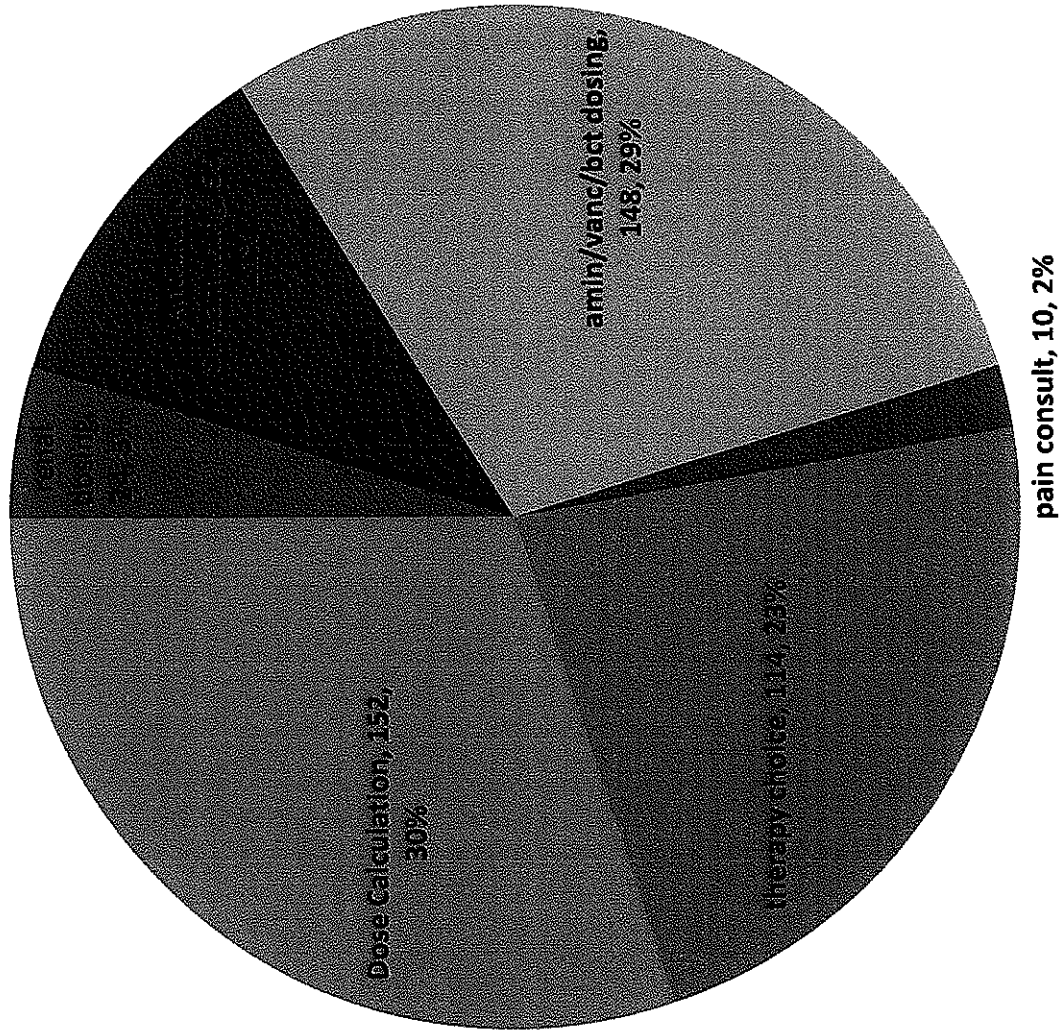
# COLLABORATIONS PER 1000 PATIENT DAYS BY MONTH 2011



# NUMBER OF COLLABORATIONS BY MONTH 2011

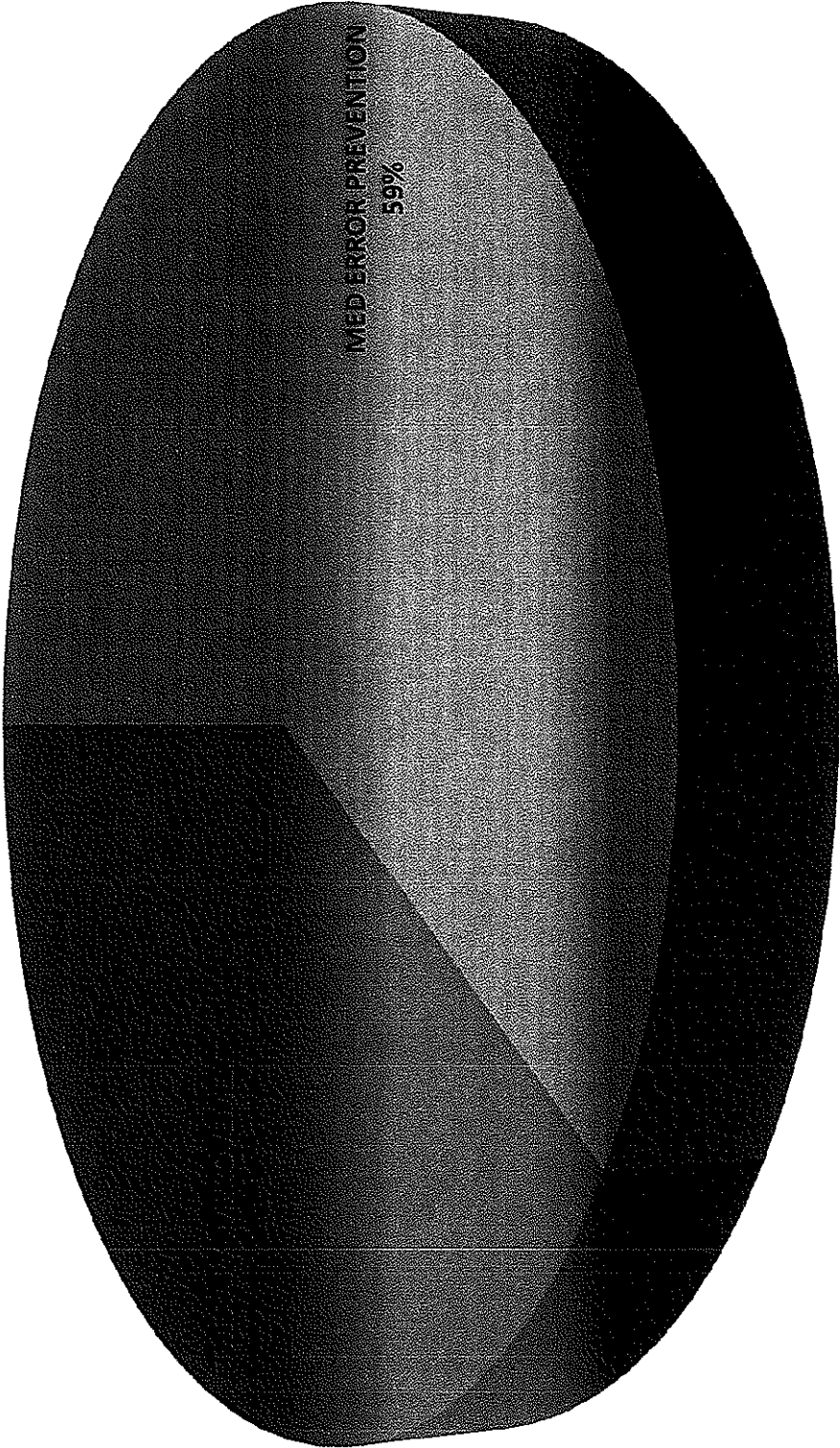


# OTHER THERAPY IMPROVEMENT 2011

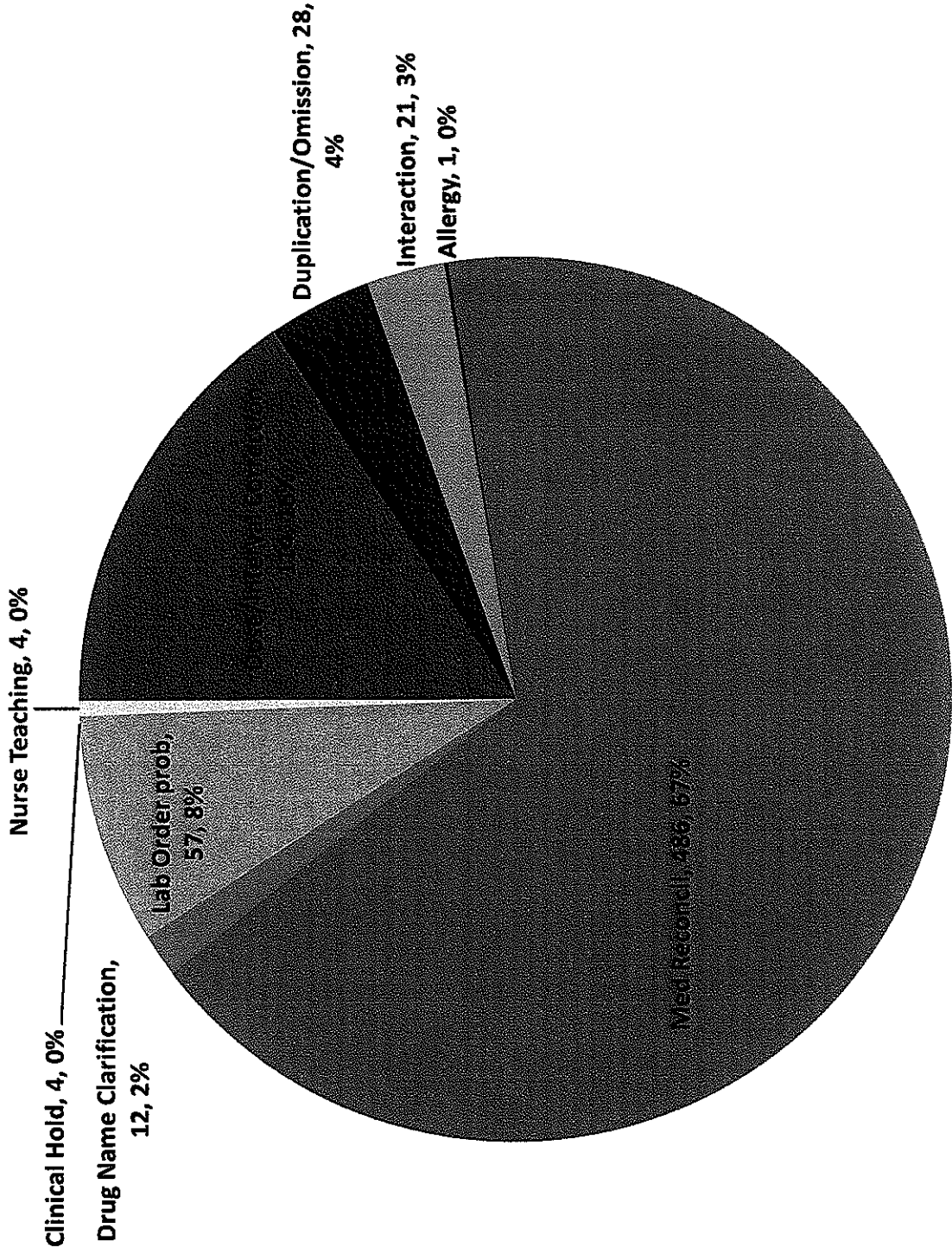




**BY TYPE OF COLLABORATION 2011**



# MED ERROR PREVENTION MONITORING 2011



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**March Board COR'S**

		Requested	
COR	LUMP SUM	\$100,000	
295	IB 9049 Stone Elevation Change	(\$6,385)	
296	IB 282 Addition of Decon Tank Manhole Cover	\$3,382	
297	RFI 1159 Ceiling heights versus window elevations	\$6,663	
298	RFI 1252 S2 Sinks	\$5,033	
300	Credit - Deletion of KVM and Access Control PC	(\$3,604)	
301	CRAH Replacement Plenum	\$2,624	
302	IB 333 Power to exhaust Fan 1-13	\$3,261	
303	IB 338 Smoke Seal	\$1,011	
304	IB 348 Power to Preaction Equipment	\$1,351	
305	IB 349 Power in Mechanical Room	\$3,163	
306	IB 355 Equipment Power at Central Plants	\$12,680	
307	IB 359 Power for HW Alarm and RFI 1366	\$4,103	
308	Horizontal PDU for IT Room, per NIH request	\$5,344	
309	IB 340 Fire Extinguisher Cabinet	\$7,447	
310	IB 342 Ice Maker Anchorage	\$4,655	
311	IB 354 Ambulance Entrance Door Control	\$4,805	
312	RFI 1236 Casework Conflict with Mech-Shades	\$905	
313	Ice Maker in Casework	\$863	
314	IB 351 Cable Tray and Kitchen Equipment	\$602	
315	Boiler Room Revisions	\$9,514	
316	Regulators for DWH	\$5,988	
TOTALS		\$79,789	
Approved Budget Remaining		\$20,211	
need John Halfen's signature			

**Northern Inyo Hospital Construction**  
150 Pioneer Lane  
Bishop, CA 93514  
P.O. Box 1532  
Bishop, CA 93515  
phone: 760-582-9020  
fax: 760-873-7246

March 27, 2012

Mr. John Halfen  
Northern Inyo Hospital  
150 Pioneer Lane  
Bishop, CA 93514

RE: Northern Inyo Hospital Construction  
Project # 1495401  
**Change Order Request Number COR - 307**

Dear Mr. Halfen,

We have finalized the required quotations for the additional work outlined below. Please see the attached supporting documentation for a complete labor, material and equipment estimate of the work.

PCO No	Description	Amount
678	IB 359 Power for HW Alarm and RFI 1366	\$4,102.83

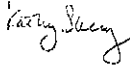
**Total Amount \$4,102.83**

This change will also result in a possible schedule impact of 0 days to the project.

Please return one (1) copy of this letter indicating your approval of this Change Order Request which increases our Contract by **Four thousand one hundred two and 83/100 dollars (\$4,102.83)**. This approval will also authorize us to issue Subcontract Change Orders accordingly.

If you have any questions regarding this Change Order Request, please call me at your earliest convenience.

Sincerely,



Kathy Sherry  
Project Manager

Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

John Halfen  
CEO - Northern Inyo Hospital

cc: File

# Turner Healthcare Turner Construction

Northern Inyo Hospital Construction  
150 Pioneer Lane  
Bishop, CA 93514  
P.O. Box 1532  
Bishop, CA 93515  
phone: 760-582-9020  
fax: 760-873-7246

March 27, 2012

Mr. John Halfen  
Northern Inyo Hospital  
150 Pioneer Lane  
Bishop, CA 93514

RE: Northern Inyo Hospital Construction  
Project # 1495401  
Change Order Request Number **COR-308** RBB IB 9091

Dear Mr. Halfen,

We have finalized the required quotations for the additional work outlined below. Please see the attached supporting documentation for a complete labor, material and equipment estimate of the work.

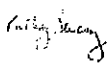
PCO No	Description	Amount
665	Horizontal PDU for IT Room, per NIH request	\$5,344.22
<b>Total Amount</b>	<b>\$5,344.22</b>	

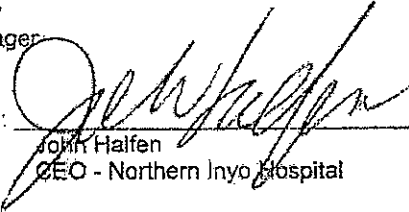
This change will also result in a possible schedule impact of 0 days to the project.

Please return one (1) copy of this letter indicating your approval of this Change Order Request which increases our Contract by **Five thousand three hundred forty four and 22/100 dollars (\$5,344.22)**. This approval will also authorize us to issue Subcontract Change Orders accordingly.

If you have any questions regarding this Change Order Request, please call me at your earliest convenience.

Sincerely,

  
Kathy Sherry  
Project Manager

Approved By:   
John Halfen  
CEO - Northern Inyo Hospital

Date: 4-9-12

cc: File

 04/06/12

**RBB NOTE:**  
This COR contains Electrical Cost. Because we cannot ask Rex Moore who's cost these are to evaluate them, we don't have the ability to review the scope or cost associated with this change. We only reviewed it from the basic position of entitlement and a quick comparison to the scope included in the IB. We defer to Turner Construction as the Construction Manager for Cost and Quantities.

Northern Inyo Hospital Construction  
150 Pioneer Lane  
Bishop, CA 93514  
P.O. Box 1532  
Bishop, CA 93515  
phone: 760-582-9020  
fax: 760-873-7246

April 02, 2012

Mr. John Halfen  
Northern Inyo Hospital  
150 Pioneer Lane  
Bishop, CA 93514

RE: Northern Inyo Hospital Construction  
Project # 1495401  
Change Order Request Number COR - 309

Dear Mr. Halfen,

We have finalized the required quotations for the additional work outlined below. Please see the attached supporting documentation for a complete labor, material and equipment estimate of the work.

PCO No	Description	Amount
641	IB 340 - FEC Change for Code Clearance	\$7,447.27
<b>Total Amount</b>	<b>\$7,447.27</b>	

This change will also result in a possible schedule impact of 0 days to the project.

Please return one (1) copy of this letter indicating your approval of this Change Order Request which increases our Contract by **Seven thousand four hundred forty seven and 27/100 dollars (\$7,447.27)**. This approval will also authorize us to issue Subcontract Change Orders accordingly.

If you have any questions regarding this Change Order Request, please call me at your earliest convenience.

Sincerely,

Kathy Sherry  
Project Manager

Approved By:



CEO - Northern Inyo Hospital

Digitally signed by John Halfen  
DN: cn=John Halfen, o=N. Inyo  
Hospital, ou,  
email=john\_halfen@nih.org, c=US  
Date: 2012.04.17 07:46:40 -07'00'

cc: File

*Kevin A. Paul* 04/16/12

<p><b>RBB NOTE:</b> COR approved contingent on no project time impact inclusive of any extended General Requirements or General Conditions. No additional claims related to this bulletin will be considered at a later date. All costs associated with this bulletin were believed to be included.</p>
---

# Turner $\equiv$ Healthcare Turner Construction

Northern Inyo Hospital Construction  
150 Pioneer Lane  
Bishop, CA 93514  
P.O. Box 1532  
Bishop, CA 93515  
phone: 760-582-9020  
fax: 760-873-7246

April 02, 2012

Mr. John Halfen  
Northern Inyo Hospital  
150 Pioneer Lane  
Bishop, CA 93514

RE: Northern Inyo Hospital Construction  
Project # 1495401  
Change Order Request Number COR 310

Dear Mr. Halfen,

We have finalized the required quotations for the additional work outlined below. Please see the attached supporting documentation for a complete labor, material and equipment estimate of the work.

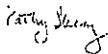
PCO No	Description	Amount
645	IB 342 Ice Maker Anchorage	\$4,654.66
<b>Total Amount</b>	<b>\$4,654.66</b>	

This change will also result in a possible schedule impact of 0 days to the project.

Please return one (1) copy of this letter indicating your approval of this Change Order Request which increases our Contract by **Four thousand six hundred fifty four and 66/100 dollars (\$4,654.66)**. This approval will also authorize us to issue Subcontract Change Orders accordingly.

If you have any questions regarding this Change Order Request, please call me at your earliest convenience.

Sincerely,



Kathy Sherry  
Project Manager

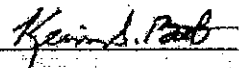
Approved By: \_\_\_\_\_

  
John Halfen  
CEO - Northern Inyo Hospital

Date: \_\_\_\_\_



cc: File

 04/06/12

**RBB NOTE:**

COR approved contingent on no project time impact inclusive of any extended General Requirements or General Conditions. No additional claims related to this bulletin will be considered at a later date. All costs associated with this bulletin were believed to be included.



Northern Inyo Hospital Construction  
150 Pioneer Lane  
Bishop, CA 93514  
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Bishop, CA 93515  
phone: 760-582-9020  
fax: 760-873-7246

April 13, 2012

Mr. John Halfen  
Northern Inyo Hospital  
150 Pioneer Lane  
Bishop, CA 93514

RE: Northern Inyo Hospital Construction  
Project # 1495401  
Change Order Request Number COR - 311

Dear Mr. Halfen,

We have finalized the required quotations for the additional work outlined below. Please see the attached supporting documentation for a complete labor, material and equipment estimate of the work.

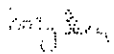
PCO No	Description	Amount
674	IB 354 Ambulance Entrance Door Control	\$4,804.90
<b>Total Amount</b>	<b>\$4,804.90</b>	

This change will also result in a possible schedule impact of 0 days to the project.


Please return one (1) copy of this letter indicating your approval of this Change Order Request which increases our Contract by **Four thousand eight hundred four and 90/100 dollars (\$4,804.90)**. This approval will also authorize us to issue Subcontract Change Orders accordingly.

If you have any questions regarding this Change Order Request, please call me at your earliest convenience.

Sincerely,


  
Kathy Sherry  
Project Mana

Approved By

  
John Halfen  
CEO - Northern Inyo Hospital

Digitally signed by John Halfen  
DN: cn=John Halfen, o=N. Inyo  
Hospital, ou,  
email=john.halfen@nih.org,  
c=US Date: \_\_\_\_\_  
Date: 2012.04.18 10:37:13 -07'00'

cc: File

  
04/16/12

**RBB NOTE:**  
COR approved contingent on no project time impact inclusive of any extended General Requirements or General Conditions. No additional claims related to this bulletin will be considered at a later date. All costs associated with this bulletin were believed to be included.

**Northern Inyo Hospital Construction**  
150 Pioneer Lane  
Bishop, CA 93514  
P.O. Box 1532  
Bishop, CA 93515  
phone: 760-582-9020  
fax: 760-873-7246

April 16, 2012

Mr. John Halfen  
Northern Inyo Hospital  
150 Pioneer Lane  
Bishop, CA 93514

RE: Northern Inyo Hospital Construction  
Project # 1495401  
**Change Order Request Number COR - 312**

Dear Mr. Halfen,

We have finalized the required quotations for the additional work outlined below. Please see the attached supporting documentation for a complete labor, material and equipment estimate of the work.

PCO No	Description	Amount
560	RFI 1236: Casework and Mech-Shades Conflict in MedSurge and ICU	\$905.48
<b>Total Amount</b>	<b>\$905.48</b>	

This change will also result in a possible schedule impact of 0 days to the project.

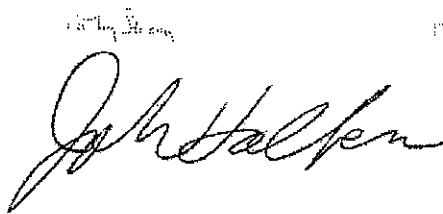
Please return one (1) copy of this letter indicating your approval of this Change Order Request which increases our Contract by **Nine hundred five and 48/100 dollars (\$905.48)**. This approval will also authorize us to issue Subcontract Change Orders accordingly.

If you have any questions regarding this Change Order Request, please call me at your earliest convenience.

Sincerely,

Kathy S  
Project

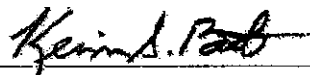
Approved



John Halfen  
CEO - Northern Inyo Hospital

Digitally signed by John Halfen  
DN: cn=John Halfen, o=N. Inyo  
Hospital, ou,  
email=john.halfen@nih.org, c=US  
Date: 2012.04.16 10:38:04 -07'00'

cc: File



04/16/12

**RBB NOTE:**  
COR approved contingent on no project time impact inclusive of any extended General Requirements or General Conditions. No additional claims related to this bulletin will be considered at a later date. All costs associated with this bulletin were believed to be included.

**Northern Inyo Hospital Construction**

150 Pioneer Lane  
Bishop, CA 93514  
P.O. Box 1532  
Bishop, CA 93515  
phone: 760-582-9020  
fax: 760-873-7246

April 16, 2012

Mr. John Halfen  
Northern Inyo Hospital  
150 Pioneer Lane  
Bishop, CA 93514

RE: Northern Inyo Hospital Construction  
Project # 1495401  
**Change Order Request Number COR - 313**

Dear Mr. Halfen,

We have finalized the required quotations for the additional work outlined below. Please see the attached supporting documentation for a complete labor, material and equipment estimate of the work.

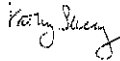
<b>PCO No</b>	<b>Description</b>	<b>Amount</b>
686	RFI 1347.1 Ice maker in Casework H2101	\$862.72
<b>Total Amount</b>	<b>\$862.72</b>	

This change will also result in a possible schedule impact of 0 days to the project.

Please return one (1) copy of this letter indicating your approval of this Change Order Request which increases our Contract by **Eight hundred sixty two and 72/100 dollars (\$862.72)**. This approval will also authorize us to issue Subcontract Change Orders accordingly.

If you have any questions regarding this Change Order Request, please call me at your earliest convenience.

Sincerely,



Kathy Sherry  
Project Manager

Approved By: \_\_\_\_\_ Date: \_\_\_\_\_  
John Halfen  
CEO - Northern Inyo Hospital

cc: File

**Northern Inyo Hospital Construction**  
150 Pioneer Lane  
Bishop, CA 93514  
P.O. Box 1532  
Bishop, CA 93515  
phone: 760-582-9020  
fax: 760-873-7246

April 23, 2012

Mr. John Halfen  
Northern Inyo Hospital  
150 Pioneer Lane  
Bishop, CA 93514

RE: Northern Inyo Hospital Construction  
Project # 1495401  
Change Order Request Number COR - 314

Dear Mr. Halfen,

We have finalized the required quotations for the additional work outlined below. Please see the attached supporting documentation for a complete labor, material and equipment estimate of the work.

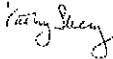
<b>PCO No</b>	<b>Description</b>	<b>Amount</b>
659	IB 351 Cable Tray and Kitchen Equipment	\$601.92
<b>Total Amount</b>	<b>\$601.92</b>	

This change will also result in a possible schedule impact of 0 days to the project.

Please return one (1) copy of this letter indicating your approval of this Change Order Request which increases our Contract by **Six hundred one and 92/100 dollars (\$601.92)**. This approval will also authorize us to issue Subcontract Change Orders accordingly.

If you have any questions regarding this Change Order Request, please call me at your earliest convenience.

Sincerely,



Kathy Sherry  
Project Manager

Approved By: \_\_\_\_\_ Date: \_\_\_\_\_  
John Halfen  
CEO - Northern Inyo Hospital

cc: File

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### SonoSite Point of Care Ultrasound System

Quote #: 100695  
Date Of Issue: 4/23/2012



To: Jennie Walker MD  
Northern Inyo Hospital  
150 Pioneer Ln

Bishop, CA 93514-2556

P: (760) 873-5811

F: (760) 872-5836

From: Carlton Colter  
SonoSite

P: 310-916-8690

E: [carlton.colter@sonosite.com](mailto:carlton.colter@sonosite.com)



# Confidential Quotation

21919 30th Drive, SE  
 Bothell, WA 98021  
 Phone: (425) 951-1200  
 Fax: (425) 951-1455  
 Email: orders@sonosite.com  
 Federal Tax ID# 91-1405022

Quote: 100695  
 Date: 4/23/2012  
 Expires: 6/7/2012  
 Market Specialty: Hospital - EMED  
 FOB: Destination  
 Corp. Acc: Amerinet-Access  
 Corp. Contract #: VQ 096 00  
 Corp. Acc. Member #: 036568

## CONFIDENTIAL QUOTATION

Sales Rep: Carlton Colter      Rep Phone: 310-916-8690      Rep Email: carlton.colter@sonosite.com

**CUSTOMER BILL TO:**      **CUSTOMER SHIP TO:**      **USER/CONTACT:**

Northern Inyo Hospital  
 150 Pioneer Ln  
 Bishop, CA 93514-2556

Northern Inyo Hospital  
 150 Pioneer Ln  
 Bishop, CA 93514-2556

**ATTN:** Andrew Stevens RN  
 ED Nursing Director  
 P: (760) 873-5811  
 F: (760) 872-5836  
 andrew.stevens@nih.org

**ATTN:** Andrew Stevens RN  
 Emer Room Clinical Dir  
 P: (760) 873-5811  
 F:  
 andrew.stevens@nih.org

**ATTN:** Jennie Walker MD  
 P: (760) 873-5811  
 F: (760) 872-5836  
 scotnjennie@mac.com

**INSTALL CONTACT** (if install contact should be someone else, please provide on purchase order if install is indicated.)

**NAME:** Andrew Stevens RN      **Phone:** (760) 873-5811      **Email:** andrew.stevens@nih.org

Purchase of SonoSite System includes four consecutive hours of installation provided by a SonoSite Clinical Specialist. The installation includes an overview of the product and accessories purchased, training on the features, functions, user interface, and system care/maintenance. Additional system installation can be purchased separately as needed. Available for US locations only.

Configuration - Included Items					
Item	Part Number - Description	Qty	List Per Unit	Unit Price	Extended Price
1	L14000 - SonoSite EDGE	1	\$35,995.00	\$28,796.00	\$28,796.00
2	P15704 - Color Application Software Package Edge	1	\$6,500.00	\$5,200.00	\$5,200.00
3	P15710 - DICOM Bundle (Print/Store/Worklist Mpps Sc)	1	\$4,000.00	\$3,200.00	\$3,200.00
4	P15707 - Credentialing Worksheets	1	\$500.00	\$400.00	\$400.00
5	P15701 - SonoMBe, EDGE	1	\$2,000.00	\$1,600.00	\$1,600.00
6	P12240 - Wireless Data Management	1	\$140.00	\$112.00	\$112.00
7	P07682 - HFL38X / 13-6 MHZ Transducer Biopsy Compatible	1	\$11,500.00	\$9,200.00	\$9,200.00
8	P07698 - P21X / 5-1 MHZ Transducer Biopsy Compatible	1	\$11,500.00	\$9,200.00	\$9,200.00
9	L15800 - EDGE Stand	1	\$2,500.00	\$2,000.00	\$2,000.00
10	P06293 - Sony Up 897 Md Black & White Video Printer	1	\$1,100.00	\$880.00	\$880.00
11	P15743 - Control Panel, English, Edge	1	\$0.00	\$0.00	\$0.00
12	P15922 - Triple Transducer Connect (TTC) w/ quick disconnect	1	\$3,000.00	\$2,400.00	\$2,400.00
13	5-YR-WARRANTY - 60 MONTHS - STANDARD COVERAGE WARRANTY	1	\$0.00	\$0.00	\$0.00



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### Quotation Pricing

Northern Inyo Hospital - Quote # 100695

<b>Total List Price:</b>	\$78,735.00
<b>Subtotal:</b>	\$62,988.00
<b>Shipping/Handling:</b>	\$0.00
<b>**Estimated Sales Tax:</b>	TBD
<b>Quotation Total:</b>	\$62,988.00

**Tax exempt customers must supply a copy of certificate. Shipping, Handling, and any applicable Sales Taxes to be determined and added to final invoice.**  
All orders subject to credit review. Upon acceptance by Customer and by SonoSite this Quotation will become a binding Sales Agreement whereby the Customer orders, and whereby SonoSite agrees to deliver, the above Products and Services in accordance with and subject to the terms, conditions and other provisions of this Sales Agreement.

\*\*Applicable Sales Tax, Shipping & Handling charges are the responsibility of the customer. For non-exempt orders, sales tax will be charged at the rates in effect for your state at the time of shipment and will be adjusted accordingly.

#### Notes To Customer:

Please sign and return along with your payment option, P.O. and any needed attachments by emailing [orders@sonosite.com](mailto:orders@sonosite.com) or faxing to (425) 951-1455.  
Please Reference the above quote # on P.O. to expedite order processing.

Please provide to SonoSite a current completed tax exempt certificate if applicable.





# Confidential Quotation

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## Quotation Acceptance Form

Northern Inyo Hospital - Quote # 100695

### CUSTOMER'S AGREEMENT TO THESE PAYMENT TERMS AND ORDER TERMS AND CONDITIONS

Customer agrees that the terms and conditions of the GPO contract indicated on this quotation, together with the attached SonoSite Warranty Schedule, shall govern this purchase.

### Customer Information (Please Complete)

Print Name: \_\_\_\_\_ Fed Tax ID/SS#: \_\_\_\_\_  
 Signature: \_\_\_\_\_ Partial Ship OK Initial Here: \_\_\_\_\_  
 Account Payable Contact: \_\_\_\_\_ Phone#: \_\_\_\_\_

### TERMS: (Please Select One)

Net 30 On Approved Credit (OAC)     Net 60 / 25% DOWN\* (OAC)     Net 90 / 50% DOWN\* (OAC)     Lease  
\*Including applicable tax, shipping + handling                      \*Including applicable tax, shipping + handling

\* Please remit payment to SonoSite Inc, #774332, 4332 Solutions Center, Chicago, IL. 60677-4003

### ATTACHED FORMS:

Credit Application     Tax Exempt Certificate     Medical Use Statement     Other

### METHOD OF PAYMENT: (Subject to approval by SonoSite, Inc.)

Credit Card #: \_\_\_\_\_ Please Circle One: VISA MC AMEX Expires: \_\_\_\_/\_\_\_\_/\_\_\_\_

Name as it appears on card: \_\_\_\_\_

Credit Card Billing Address: \_\_\_\_\_

\* If paying by Credit Card please call sales administration to provide CC Security Code.

P.O.#: \_\_\_\_\_ Date: \_\_\_\_\_

Check#: \_\_\_\_\_ Amount: \_\_\_\_\_

Please sign and return along with your payment option, P.O. and any needed attachments  
 by emailing orders@sonosite.com or faxing to (425) 951-1455.

Please Reference the above quote # on P.O. to expedite order processing.



SONOSITE WARRANTY SCHEDULE

1. Scope and Duration of Warranties

Covered Products. The warranties contained in this Warranty Schedule are limited to the following Products (collectively, the "Covered Products"):

- (a) (i) Newly manufactured MicroMaxx ultrasound systems, S Series ultrasound systems, M-Turbo ultrasound systems and NanoMaxx ultrasound systems, and any newly manufactured transducers for those systems that are not listed in Subsections 1(b) or 1(d) below. (collectively, the "Five Year Warranty Products");
(b) (i) Newly manufactured and remanufactured 180PLUS/ELITE, iLook, and TITAN ultrasound systems and the transducers for such systems, (ii) newly manufactured TEE transducers, (iii) newly manufactured and remanufactured D2, SLA, SLT, C8 and LAP transducers for the Five Year Warranty Products, (iv) remanufactured MicroMaxx ultrasound systems, S Series ultrasound systems, M-Turbo ultrasound systems and NanoMaxx ultrasound systems, and remanufactured transducers for such systems (excluding TEE transducers, which are covered in Section 1(e) below), (v) newly manufactured BioZ.com, BioZ Monitor, BioZ DX and BioZ Cardio Profile impedance cardiography systems, and (vi) all remanufactured impedance cardiography systems (collectively, the "Other System Products");
(c) Stands, batteries, monitors, and other accessories for the Five Year Warranty Products and Other System Products that carry the SonoSite label (collectively, the "SonoSite Accessories");
(d) Newly manufactured L52 transducers for the Five Year Warranty Products;
(e) Remanufactured TEE transducers for the Five Year Warranty Products (the "Remanufactured TEE Transducers"); and
(f) Spare parts, add-ons, non-software upgrade packages and factory-rebuilt sub-assemblies.

For purposes of this Warranty Schedule, ex-demo equipment purchased directly from a SonoSite sales representative is considered to be "newly manufactured", except as otherwise noted on the quotation provided to Customer.

Third Party Products. SonoSite does not provide a warranty or warranty service for Products that are manufactured by a third party and do not carry the SonoSite label, even if such Products are sold and distributed by SonoSite. All warranty terms (if any) for such Products are provided by the third party manufacturer and are governed by documentation provided by the manufacturer and included with the shipment to Customer.

Product Warranties. SonoSite warrants to Customer that each Covered Product will be free from defects in materials and manufacture and will operate in all material respects in accordance with the functional specifications in the User Guide provided by SonoSite with the Covered Product, as modified by any written updates subsequently made available by SonoSite. This warranty is made to Customer only and does not extend to any subsequent purchaser of the Covered Product unless (a) Customer has provided SonoSite (to the attention of the SonoSite Sales Administration Dept.) with advance written notice of such transfer and SonoSite has not objected to such transferee within fifteen (15) days after receiving the written notice, and (b) the transferee is a qualified medical professional.

Warranty Period. The warranty period for all warranties is limited in accordance with Section 4 (Warranty Types) below. The initial warranty period begins on the date that SonoSite delivers the Covered Products in accordance with this Agreement. The warranty period for any replacement product or component or repair to a Covered Product that is furnished to Customer as a warranty remedy will be the unexpired portion of the warranty period applicable to the original Covered Product. If a Customer has upgraded Trade-in Equipment that is covered by a Standard Protection Extended Warranty, Total Coverage Protection, or Extended Total Coverage Protection (as defined in Section 4 below), such warranties shall apply to the New Equipment purchased by Customer for the remainder of the original term.

2. Warranty Exclusions

The foregoing warranties of Covered Products do not cover:

- (a) Any defect or deficiency of the Covered Product that results, in whole or in part, from (1) failure to operate, maintain or store the Covered Product in accordance with applicable specifications, instructions and manuals; (2) the dismantling, repair or alteration of the Covered Product by unauthorized personnel, or; (3) obvious abuse, negligence, or intentional damage of the Covered Product.
(b) Damage to or malfunction of transducers due in whole or in part to (1) disinfecting or sterilizing incorrectly without the SonoSite protective connector box or with chemicals not recommended by SonoSite (2) patient bite marks or holes, (3) pinched endoscopes, or (4) discoloration or chemical breakdown of endoscope.
(c) Covered Products that are used outside the United States or Canada, unless an alternative location is approved in advance by SonoSite.
(d) Covered Products that are subjected theft, vandalism or disasters such as flood, fire or war.

SonoSite is not responsible for any loss of stored data that may occur while Covered Products are being repaired at SonoSite's facility. Customer is responsible for backing up all data stored on a system and removing it from the system prior to receipt by SonoSite.

3. Exclusive Warranty Remedies

In the event of a breach of warranty of a Covered Product, Customer must notify SonoSite in writing within a reasonable time and in no event more than thirty (30) days after the discovery of the breach. Upon such timely notice, SonoSite will, at SonoSite's option, repair, adjust or replace (with new or exchanged replacement parts) the non-conforming Covered Product. If SonoSite determines that such repair, adjustment or replacement cannot occur despite its reasonable efforts, then SonoSite may elect to refund to Customer the amount paid by Customer for the Covered Product in exchange for such Covered Product

Table with 4 columns: F00116, Rev: V, Terms and Conditions, Domestic, Page: 5. Below the table is a confidentiality statement: 'This document contains confidential information that is proprietary to SonoSite. Neither the document nor the information contained therein should be disclosed or reproduced in whole or in part, without express written consent of SonoSite.'



## Confidential Quotation

in full satisfaction of SonoSite's obligations under this Warranty Schedule. THE REMEDY SELECTED BY SONOSITE IN ACCORDANCE WITH THIS PARAGRAPH SHALL BE THE EXCLUSIVE AND SOLE REMEDY OF CUSTOMER FOR ANY BREACH OF WARRANTY.

Warranty services will be performed during SonoSite's normal business hours (Monday to Friday, 8 a.m – 5 p.m. (Pacific Time), excluding holidays).

#### 4. Warranty Types

(a) Standard Warranty: For all Covered Products within the warranty period, SonoSite will provide warranty service at SonoSite authorized service locations. For Five Year Warranty Products and Other System Products within the warranty period, SonoSite will also provide replacement products of equivalent or better condition or loaner products delivered via overnight delivery to a U.S. address only (where such service is available), to be used by Customer during warranty service.

Warranty Period (for products defined in Section 1 above):

(1) Five Year Warranty Products: five years

(2) Other System Products and SonoSite Accessories: one year

(3) Newly manufactured L52 transducers for the Five Year Warranty Products: two years

(4) Remanufactured TEE Transducers, and Sensors: ninety (90) days

(5) Spare parts, add-ons, non-software upgrade packages and factory-rebuilt sub-assemblies:

(a) ninety (90) days from the date such items are delivered in accordance with this Agreement, or

(b) in the case of a warranty repair or replacement, the preceding ninety (90) day period or the unexpired Standard Warranty period for the original Covered Product, whichever is longer.

To obtain warranty service, Customer must deliver the Covered Product to the authorized service location (at SonoSite's expense). Title to and the risk of loss, damage or casualty to the Covered Products remains with Customer until delivery to the service location. SonoSite's Standard Terms and Conditions or if Customer has purchased the original Products under a GPO or IHN agreement, the terms of such agreement, govern the return of repaired or replaced Products to the Customer.

(b) Total Coverage Protection: For an additional charge, in addition to the Standard Warranty, SonoSite will also provide the following enhanced warranty services for Five Year Warranty Products and Other System Products. Total Coverage Protection is not available for TEE, D2, SLA, L52, C8, SLT or LAP transducers, systems or transducers for veterinary use, or impedance cardiography products.

(1) notwithstanding Sections 2(a) and (b) (Warranty Exclusions), repair or replacement of Covered Products damaged by accidental mishandling, theft, vandalism, or disaster provided that no single system or transducer will be repaired or replaced more than twice during the duration of this Total Coverage Protection (including extensions of the original term), and;

(2) Loaner products, delivered via overnight delivery, to be used while Total Coverage Protection service is being performed.

Total Coverage Warranty Period:

Five Year Warranty Products: Five-year term (same as initial Standard Warranty period), or one year extensions of the Standard Warranty

Other System Products: one year

To obtain warranty service, Customer must deliver the affected Product to the authorized service location (at SonoSite's expense), and the same terms and conditions for obtaining warranty service under the Standard Warranty shall apply.

#### (c) Extended Warranties

(1) Standard Protection Extended Warranty: extends Standard Warranty by one year increments, effective from the last day of the then-current warranty period, up to a maximum warranty coverage period of eight (8) years from the original Product ship date for Five Year Warranty Products and five (5) years from the original Product ship date for Other System Products. This extended warranty is not available for SonoSite Accessories, or for SLA, TEE, SLT, C8, LAP, L52 or D2 transducers.

(2) Extended Total Coverage Protection: extends existing Total Coverage Protection by one year increments, effective from the last day of the then-current warranty period, up to a maximum coverage period of eight (8) years from the original Product factory ship date for Five Year Warranty Products and five (5) years from the original Product factory ship date for Other System Products. Extended Total Coverage Protection is not available for TEE, D2, SLA, L52, SLT, C8 or LAP transducers, or systems or transducers for veterinary use. Extended Total Coverage Protection runs concurrently with Standard Protection Extended Warranty Coverage.

(d) Services Warranty: SonoSite warrants that the repair services rendered in satisfaction of the warranties described in Sections 4(a)-(c) will be performed by qualified personnel in a professional manner. This warranty shall not be deemed to extend the warranty period for any Covered Product.

**NOTE: To the extent there is any conflict between the terms of this Warranty Schedule and any other documentation or statements provided by SonoSite, the terms of this Warranty Schedule will prevail.**

F00116	Rev: V	Terms and Conditions, Domestic	Page: 6
This document contains confidential information that is proprietary to SonoSite. Neither the document nor the information contained therein should be disclosed or reproduced in whole or in part, without express written consent of SonoSite.			

# EDGE

## SYSTEM SPECIFICATIONS



SonoSite

# INTRODUCING THE NEW EDGE™ ULTRASOUND SYSTEM FROM SONOSITE

### SYSTEM SPECIFICATIONS:

<b>System weight</b>	8.5 lbs./3.85 kg with battery
<b>Dimensions</b>	12.9" x 12.4" x 2.5" / 32.7 cm x 31.5 cm x 6.4 cm (L x W x H)
<b>Display</b>	12.1"/30.7 cm diagonal LCD (NTSC or PAL)
<b>Architecture</b>	All-digital broadband
<b>Dynamic range</b>	Up to 165 dB
<b>Gray scale</b>	256 shades
<b>HIPAA compliance</b>	Comprehensive tool set

### IMAGING MODES AND PROCESSING:

#### Broadband, Multifrequency Imaging:

- 2D / Tissue Harmonic Imaging / M-Mode
- Velocity Color Doppler / Color Power Doppler
- PW, PW Tissue Doppler and CW
- Doppler angle, correct after freeze

#### Image processing:

- SonoADAPT™ Tissue Optimization
- SonoHD2™ Imaging Technology
- Advanced Needle Visualization
- Dual Imaging, Duplex Imaging, 2x pan/zoom capability, Dynamic range and gain
- ColorHD™ Technology

### USER INTERFACE AND REMAPPABLE CONTROLS:

- Softkeys to drive advanced features
- Programmable A and B keys: each can be assigned by the user for increased ease of use
- Silicone splash resistant sealed QWERTY keyboard
- Track pad with select key for easy operation and navigation
- Doppler controls: angle, steer, scale, baseline, gain and volume
- Image acquisition keys: review, report, Clip Store, save

- Dedicated AutoGain and exam keys to allow quick activation
- Color controls: size/position, angle, scale, baseline and invert

### TRANSDUCERS:

#### Broadband/Multifrequency:

- Linear Array, Curved Array, Phased Array, Multiplane TEE (U.S. only) and Micro-Convex

#### Single Frequency:

- Cardiac Static Pencil

### APPLICATION SPECIFIC CALCULATIONS:

**OB/Gyn/Fertility:** Diameter/ellipse measurements, volume, ten follicle measurements, estimated fetal weight, established due date, gestational age, last menstrual period, growth charts, user-defined tables, multiple user-selectable authors, ratios, amniotic fluid index, patient report, humerus and tibia measurement and charts

**Vascular:** Diameter/ellipse/trace measurements, volume, volume flow, percent diameter and area reduction, Lt/Rt CCA, ICA, ECA, ICA/CCA ratio, time average mean (TAM), peak trace, ICA/CCA ratio, angle correction, patient report

#### CIMT (Carotid Intima Media Thickness):

Embedded SonoCalc® IMT software (optional) – automatic edge detection with mean and maximum thickness reporting

**Cardiac:** Automated Cardiac Output package and patient report including: ventricular, aortic and atrial measurements; ejection fraction, volume measurements, Simpson's rule, continuity equation, pressure half-time and cardiac output; PA AT, TV E, A, PHT, TVI, MV time, Pulm Veins

**Transcranial Doppler (TCD):** Complete TCD package including Time Average Peak (TAP)





### ONBOARD IMAGE AND CLIP STORAGE/REVIEW:

- 8GB internal Flash memory storage capability  
Potential to store 30,000 images or 960 2-second clips
- Clip Store capability (maximum single clip length: 60 seconds)
- Clip Store capability via either number of heart cycles (using the ECG) or time base. Maximum storage in ECG beats mode is 10 heart cycles. Maximum storage in time base mode is 60 seconds
- Cine review up to 255 frame-by-frame images

### MEASUREMENT TOOLS, PICTOGRAMS AND ANNOTATIONS:

**2D:** Distance calipers, ellipse and manual trace  
**Doppler:** Velocity measurements, pressure half time, auto and manual trace

**M-Mode:** Distance and time measurements, heart rate calculation

**User-selectable text and pictograms**

**User-defined, application-specific annotations**  
**Biopsy guidelines**

### EXTERNAL DATA MANAGEMENT AND WIRELESS:

- **SonoSite® Workflow Solutions (SWS™):**  
Streamlines exam management for billing, credentialing, archive & EMR Integration
- PC/Mac export configuration
- Export BMP, JPEG or DICOM images to a USB device
- Storage capacity alert if internal storage memory is less than 10%

### CONNECTIVITY:

- S-video (in/out) to VCR for record and playback
- DVI output
- Composite video output (NTSC/PAL) to VCR or video printer
- Audio output
- Integrated speakers
- Ethernet or wireless image/data transfer
- USB ports (2)
- RS-232 transfer
- **DICOM® Image Management:** Store, Print, Storage Commit, Modality Worklist, MPPS

### POWER SUPPLY:

- System operates via battery or AC power
- Rechargeable lithium-ion battery
- AC: universal power adapter, 100-240 VAC, 50/60 Hz input, 15 VDC output

### EDGE STAND AND PERIPHERALS:

- Transducer and gel holders
- Optional Triple Transducer Connect (TTC) to quickly activate transducers electronically
- Optional foot switch

### OPTIONAL PERIPHERALS:

**Printers:** Medical-grade black and white or color

**External data input devices:** Bar code reader

**ECG module:** 3-lead ECG – works with standard ECG leads and electrodes

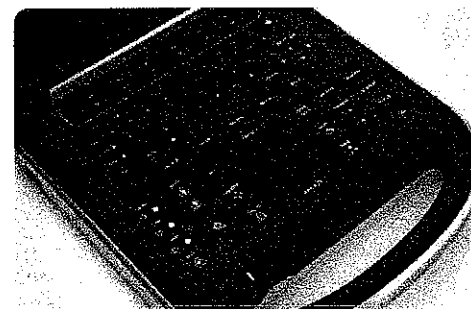
External analog ECG input also available

Edge, SonoSite, the SonoSite logo, and other trademarks not owned by third parties are registered or unregistered intellectual property of SonoSite, Inc.

Bluetooth is a registered trademark of Bluetooth SIG, Inc.

Mac is a trademark of Apple Inc., registered in the U.S. and other countries.

DICOM is the registered trademark of the National Electrical Manufacturers Association for its standards publications relating to digital communications of medical information.



A splash resistant keyboard for easy cleaning and infection control.

## SonoSite

SonoSite, Inc.  
Worldwide Headquarters  
21919 30th Drive SE, Bothell, WA 98021-3904  
Tel: +1 (425) 951-1200 or +1 (877) 657-8050  
Fax: +1 (425) 951-6800 E-mail: [edge@sonosite.com](mailto:edge@sonosite.com)

[www.sonosite.com/products/edge](http://www.sonosite.com/products/edge)

### SonoSite Worldwide Offices

SonoSite Australasia Pty Ltd – Australia New Zealand	1300-663-516 0800-888-204
SonoSite – Brazil	+55 61 8118 7100
SonoSite Canada Inc. – Canada	+1 888-554-5502
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SonoSite Ltd – United Kingdom	+44 1462-444800
SonoSite SARL – France	+33 1-69-18-96-30

**EDGE**

**TRANSDUCERS**



**READY FOR  
A COMPLETE  
RANGE OF  
APPLICATIONS**



SonoSite designs, manufactures and tests transducers in-house with real-world customer needs in mind. Our transducers exceed stringent military specifications for drop testing so you can use them with confidence in the most demanding of environments. Maybe that's why SonoSite is the only ultrasound company to offer an industry leading 5-year warranty on the transducers it manufactures.






SonoSite

# TRANSDUCERS


**L38xi**



**10-5MHz Linear**

Applications:  
breast  
JMT  
musculoskeletal  
nerve  
small parts  
vascular  
venous  
Scan depth:  
9 cm


**HFL38x**



**13-6MHz Linear**

Applications:  
breast  
JMT  
musculoskeletal  
nerve  
small parts  
vascular  
venous  
Scan depth:  
6 cm


**HFL50x**



**15-6MHz Linear**

Applications:  
breast  
musculoskeletal  
nerve  
small parts  
Scan depth:  
6 cm


**L25x**



**13-6MHz Linear**

Applications:  
musculoskeletal  
nerve  
superficial  
vascular  
venous  
ophthalmic  
Scan depth:  
6 cm


**C8x**



**8-5MHz Curved**

Applications:  
prostate  
(transrectal)  
Scan depth:  
11.5 cm


**C11x**



**8-5MHz Curved**

Applications:  
abdominal  
neonatal  
nerve  
vascular  
cardiology (Vet)  
Scan depth:  
10 cm

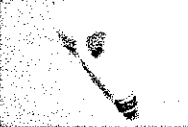
**C60x**



**5-2MHz Curved**

Applications:  
abdominal  
musculoskeletal  
nerve  
ob  
gyn  
Scan depth:  
30 cm


**ICTx**



**8-5MHz Curved**

Applications:  
ob  
gyn  
Scan depth:  
13 cm


**P21x**



**5-1MHz Phased**

Applications:  
abdominal  
cardiology  
ob  
orbital  
TCD  
Scan depth:  
35 cm

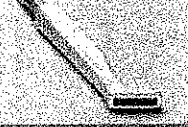
**P10x**



**8-4MHz Phased**

Applications:  
ped. abdominal  
ped. cardiology  
neonatal head  
Scan depth:  
14 cm

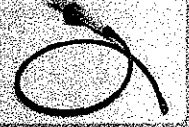
**SLAx**



**13-6MHz Linear**

Applications:  
musculoskeletal  
nerve  
superficial  
vascular  
venous  
Scan depth:  
6 cm


**TEEX (U.S. only)**



**8-3MHz Multi**

Applications:  
adult cardiology  
multiplane transesophageal 180° rotation of the imaging plane, providing a 360° field of view  
Scan depth:  
18 cm


**D2x**



**2MHz Pencil**

Applications:  
cardiology (CW)  
Scan depth:  
N/A

**L52x (Vet)**



**10-5MHz Linear**

Applications:  
musculoskeletal  
ob  
vascular  
Scan depth:  
15 cm

Needle guides and kits available with the following transducers – L38xi, HFL38x, HFL50x, C60x, ICTx, P21x, C8x and L25x. A transverse needle guide is available with the L25x transducer.

For detailed information, please visit: [www.sonosite.com/products/edge](http://www.sonosite.com/products/edge) or speak with your SonoSite customer representative.

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**SonoSite, Inc.**  
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 SonoSite GmbH – Germany +49 91-31-97-79-29-0  
 SonoSite Iberica SL – Spain +34 91-640-49-11  
 SonoSite India Pvt Ltd – India +91 124-288-1100  
 SonoSite Italy S.r.l. – Italy +39 02-98490885  
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 SonoSite Ltd – United Kingdom +44 1462-444800  
 SonoSite SARL – France +33 1-69-18-96-30

## Universal Stand

The universal stand offers physicians a more ergonomic design with a lighter, more robust, and modular architecture. Ideal for point-of-care ultrasound applications, the universal stand can be easily maneuvered through crowded hospital corridors and optimally positioned at the patient's bedside or in other space-constrained areas. The H-Universal™ Stand and the V-Universal™ Stand's are compatible with our third and fourth generation products.

The universal stand can be upgraded to incorporate SonoSite Power Solutions (see reverse side) to offer the most flexible options to meet the challenges of point-of-care environments.

### Features:

- Four transducer holders
- Cable hooks
- Locking wheels
- Storage basket
- Power supply
- Keyboard tray\*

### Peripherals (optional):\*\*

- Sony B&W printer
- Sony color printer
- Sony DVD recorder
- 15 in. auxiliary monitor\*\*\*
- Triple transducer connect\*\*\*

### Accessories:

- PowerPark—Dedicated charging station
- PowerPack—Extended battery pack

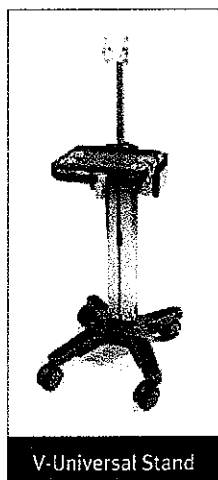
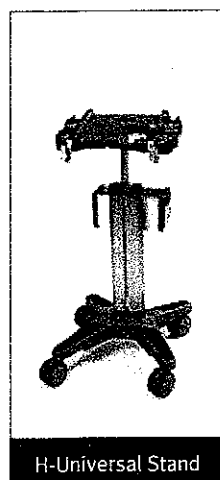
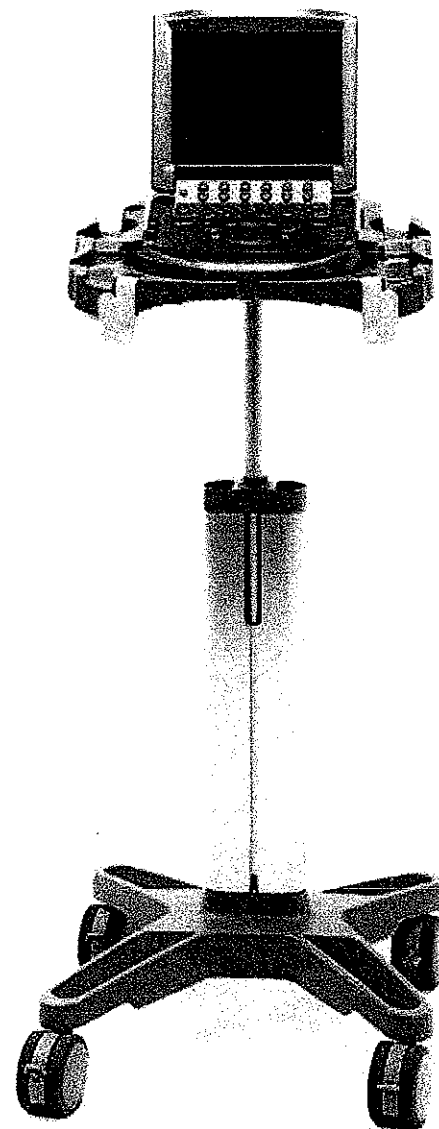
The H-Universal Stand can be configured with the M-Turbo® and MicroMaxx® ultrasound systems.

The V-Universal Stand can be configured with the S Series™ and NanoMaxx™ ultrasound systems.

\*V-Universal Stand only

\*\*V-Universal Stand only accommodates one peripheral

\*\*\*H-Universal Stand only



Specifications	H-Universal Stand	V-Universal Stand
Width:	20 in./50.8 cm	20 in./50.8 cm
Depth:	23 in./58.4 cm	23 in./58.4 cm
Height:	Min: 33 in./83.8cm. Max: 45 in./114.3 cm.	Min: 42.5 in./108 cm Max: 54.5 in./138.4 cm
Pneumatic height range:	12 in./30.5 cm	12 in./30.5 cm
Weight:	40.0 lbs./18.1 kg	45.0 lbs./20.5 kg



## PowerPark—Dedicated Charging Station

For true mobility to any point-of-care location around the hospital or office, the PowerPark† is a cordless and convenient charging solution for SonoSite ultrasound systems. The PowerPark provides a dedicated charging station while the ultrasound system is mounted on the stand. Just park and charge.

- Increase workflow and efficiency—System remains fully-charged
- Provide storage—Dedicated storage location for stand and ultrasound system
- Facilitate cord management—No need for ultrasound system electrical cords

### Specifications:

Width	8.6 in./21.8 cm
Length	15 in./38.1 cm
Height	4.8 in./12.2 cm
Weight	20 lbs./9 kg



† The PowerPark and PowerPack are compatible with SonoSite's H-Universal Stand and V-Universal Stand. The PowerPark can be used with the MicroMaxx, NanoMaxx, M-Turbo and S Series ultrasound systems and the PowerPack is compatible with the M-Turbo, S Series and NanoMaxx ultrasound systems.

†† Product release is expected Q4 2010.

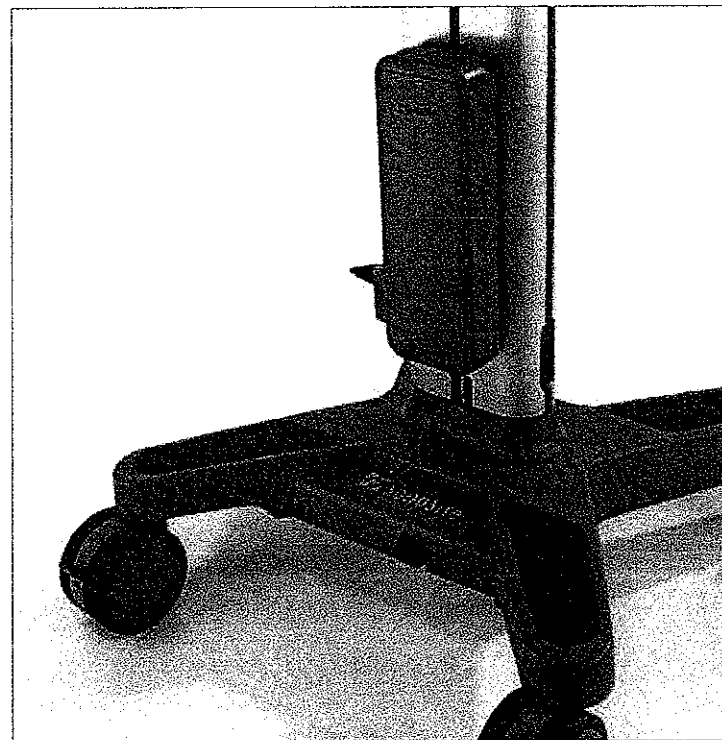
## PowerPack—Extended Battery Pack

The ultimate power solution for hospital and office settings, SonoSite's PowerPack†† is an innovative and streamlined external battery pack. With the ability to double a system's battery life, the PowerPack provides improved flexibility and efficiency, enabling physicians to see more patients on a single battery charge. The PowerPack can be easily installed on the SonoSite universal stand for a ready-to-go charging solution.

- Improves flexibility and workflow
- Extends the operating time of the ultrasound system
- Reduces the need to seek a power supply outlet in the patient exam room

### Specifications:

Width	4 in./10.2 cm
Length	10 in./25.4 cm
Height	2 in./5.1 cm
Weight	1.4 lbs./0.6 kg



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[www.sonosite.com/products/powersolutions](http://www.sonosite.com/products/powersolutions)

### SonoSite Worldwide Offices

SonoSite Australasia Pty Ltd – Australia  
– New Zealand

SonoSite KK – Japan  
SonoSite SARL – France  
SonoSite GmbH – Germany  
SonoSite India Pvt Ltd – India  
SonoSite Iberica SL – Spain  
SonoSite Ltd – China – Shanghai  
SonoSite Canada Inc. – Canada  
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+34 91-640-69-11  
+86 21-5239-6693  
+1 888-554-5502  
+44 1462-444800  
+39 02-98490885

## SonoSite's Industry-leading Warranty

SonoSite's technology-driven, 5-year standard warranty covers damage to the system and SonoSite-manufactured transducers due to defective materials, workmanship, and/or failure to operate in accordance with specifications in the User Guide. We will provide customers with loaner equipment of systems and transducers the next day where delivery is available. Additional coverage is available for purchase.



### 5-year warranty inclusions:

- M-Turbo® and S Series™** ultrasound systems. Transducers: C60x, HFL38x, L38xi, L25x, C11x, ICTx, P10x, P21x, HFL50x
- MicroMaxx®** ultrasound system. Transducers: C60e, HFL38, L38e, P10, L25e, C11e, ICTe, P17
- NanoMaxx™** ultrasound system. Transducers: C60n, L38n, L25n, C11n, P21n

Cost savings from SonoSite's 5-Year Standard Warranty		
Year	SonoSite's 5-Year Standard Warranty	Industry 1-Year Standard Warranty*
1	\$0	\$0
2	\$0	\$4,000
3	\$0	\$4,000
4	\$0	\$4,000
5	\$0	\$4,000
<b>Additional cost to customer</b>	<b>\$0</b>	<b>\$16,000</b>

\* Based on \$50,000 purchase price and annual service contract of 10% of purchase price.

### Warranty for Accessories and OEM Transducers

SonoSite accessories, as well as products and accessories made by our manufacturing partners that carry the SonoSite label, are covered under a 1-year warranty that covers damage due to defective materials and workmanship, and/or failure of the accessories and transducers named below to operate in accordance with specifications in the User Guide.

### 1-year warranty inclusions:

- Transducers: C8e, TOE/TEE, SLA, SLT, D2 (Cardiac static pencil)
- Accessories: H-Universal™ Stand, V-Universal™ Stand, SonoRemote™ Control

Please see SonoSite's Terms and Conditions for detailed coverage information on SonoSite's warranty offerings. Terms may vary for veterinary products.

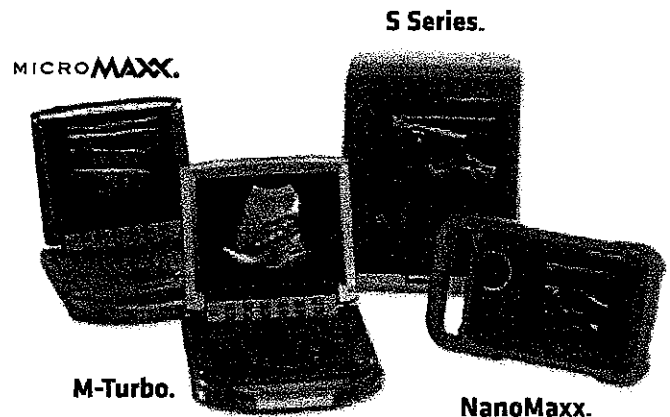
Call (877) 657-8050 to speak to a SonoSite representative to find out more about these options or to ask about the status of your warranty.



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[www.sonosite.com/support/warranty-and-service](http://www.sonosite.com/support/warranty-and-service)



# How can we offer the best warranty in the industry?



When you build very durable products, you can eliminate annual service contracts and offer a 5-year warranty to deliver the lowest cost of ownership in point-of-care medicine.

SonoSite's hand-carried and mounted ultrasound systems are the toughest in the industry. Built to exceed military specifications, our systems and proprietary transducers withstand a 3-foot drop onto a hard surface and resist fluid contamination. In the unlikely event your system or transducer needs repair, we have an overnight loaner program to minimize downtime.

SonoSite's third and fourth generation ultrasound systems comes with the same industry-leading, 5-year warranty that you have come to expect from us. With an installed base of more than 50,000 systems worldwide, our technology-driven warranty is based on a proven record of reliability and durability—just one of the reasons customers give us a 99% satisfaction rating.

Visit [www.sonosite.com/support/warranty-and-service](http://www.sonosite.com/support/warranty-and-service) or call (877) 657-8050 to speak with a customer service representative.

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**Risk Placement Services, Inc.**

Knowledge. Relationships.  
Trust and Confidence.

Risk Placement Services  
701 S. Parker Street  
Suite 6200  
Orange, CA 92868-4720  
Ph: 714-558-6141  
Fax 714-558-6143

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## INSURANCE QUOTE - REVISED

**DATE ISSUED:** April 17, 2012

**AGENT:** Diane Corsaros Insurance Agency  
371 N. Main St., Suite A,  
Bishop, CA 93514

**INSURED:** Northern Inyo Hospital  
150 Pioneer Lane  
Bishop, CA 93514

**INSURER:** Underwriters at Lloyd's London/QBE Specialty Insurance  
Non-Admitted AM Best Rating: A XV (Lloyds) and A XI (QBE Specialty)

**COVERAGE:** DIC including Earthquake and Flood

**POLICY PERIOD:** 4/21/12 TO 4/21/13

**Minimum Earned Premium:** 25%

**PREMIUM:** \$15,000.00

**FEES:** Carrier Policy Fee \$200.00  
Broker Fee - RPS \$510.00

**TAXES:** \$494.00

**TOTAL:** \$16,204.00

**THE PREMIUM ABOVE DOES NOT INCLUDE TERRORISM COVERAGE. IF THE INSURED ELECTS TO PURCHASE TERRORISM COVERAGE THE ADDITIONAL PREMIUM WILL BE \$1,500.00 PLUS TAX OF \$48.75.**

**TERMS / CONDITIONS / SUBJECTIVITIES:** SEE ATTACHED COMPANY QUOTE.  
**REQUIRED PRIOR TO BINDING:**  
1) SIGNED D1 FORM 2) ADVISE IF TRIA COVERAGE IS ACCEPTED OR REJECTED.



**\*\*Estimated Commercial Property Quote #212981\*\***

Coverage is underwritten by ICAT Managers on behalf of the Company(ies) listed below.  
Coverage will be written on the ICAT DICNA 100 form.

**Company Participation:**

This quote is provided by the carriers listed below in the participation amounts listed. Each carrier will be responsible for their respective participation of all losses under this policy. Each of the Companies will be severally (but not jointly) liable solely for its own pro rata share.

Carrier	% Participation
Underwriters at Lloyd's (AM Best: A (XV), S&P: A+)	60%
QBE Specialty Insurance Company (AM Best: A(XI), S&P: A+)	40%

\*One or more of the companies participating on this policy are non-admitted. The Producer is responsible for calculation and remittance of all Surplus Lines Taxes and Fees.

**Created: April 17, 2012**

**PRODUCER:** RISK PLACEMENT SERVICES CA, ORANGE, 5661123

**NAMED INSURED:** Northern Inyo Hospital

**PERILS:** Difference In Conditions including Earthquake, and Flood , per ICAT DICNA 100.

**COVERAGE:** Business Personal Property, Earthquake Sprinkler Leakage.

**POLICY TERM:** 1 Year, effective April 21, 2012.

**LOCATION (S):** As per the schedule provided by the Producer and on file with the Company.

**TOTAL INSURABLE VALUES:** \$12,000,000 at 100% replacement cost.

**LIMIT OF INSURANCE:** As per the schedule on file with the Company, not to exceed \$12,000,000 in the aggregate for all coverages. Annual aggregate applies separately for the perils of Earthquake and Flood.

**DEDUCTIBLE:**  
 Earthquake: 5% per occurrence applied by Line of Coverage. Subject to a Minimum deductible of: \$50,000 per occurrence applied by Policy.  
 Flood: 5% per occurrence applied by Line of Coverage. Subject to a Minimum deductible of: \$50,000 per occurrence applied by Policy.  
 All Other Causes of Loss: \$25,000 per occurrence applied by Policy.



PREMIUM:

	PREMIUM	POLICY FEE	TOTAL PREMIUM AND FEES
Underwriters at Lloyd's and QBE Specialty Insurance Company	\$15,000	\$200	\$15,200
		Inspection Fee	Waived
		<b>Total</b>	<b>\$15,200</b>

\*\*\*PLUS TAXES AND FEES\*\*\*

TERRORISM:

Coverage for a cause of loss quoted above resulting from an Act of Terrorism is available for an additional premium of \$1,500, in compliance with the Federal Terrorism Risk Insurance Act. Please see attached notice for important information about this coverage.

CONDITIONS:

Subject to Flood Zone Verification.

All coverage's are per standard forms and endorsements in use by ICAT at the time of binding unless otherwise stated. The terms and conditions may be different than those requested in your original submission. Please make sure you have reviewed this document carefully with your insured. ICAT does not take any responsibility for differences between this document and terms originally requested.

Minimum Earned Premium of 25% applies.

EXCLUSIONS:

Coverage for mold cleanup and removal may be available for additional premium.

Risks located in a Special Hazard Flood Area (SHFA) are excluded from coverage.

All other exclusions per standard forms and endorsements in use by ICAT at the time of binding this account.

This proposal is good for 30 days from the date shown above.

Warrant no expiring QBE markets that are quoted herein unless exception by the underwriter. If QBE participates on expiring, ICAT may offer this quote on behalf of other markets. Please contact your ICAT U/W.

This proposal has been prepared with underwriting information supplied by the Producer. It is the Producer's responsibility to provide accurate underwriting information and coverage values that comply with the Company's 100% replacement cost valuation requirements. The Company reserves the right to reject any submission or alter the quotation or terms of the proposal based on additional information.





COVERAGE FOR A CAUSE OF LOSS QUOTED ABOVE RESULTING FROM AN ACT OF TERRORISM AS DEFINED BELOW IS AVAILABLE FOR AN ADDITIONAL \$1,500 PLUS ANY APPLICABLE STATE IMPOSED TAXES OF SURCHARGES. PLEASE SEE THE NOTICE OF TERRORISM COVERAGE DIRECTLY BELOW FOR IMPORTANT INFORMATION REGARDING THIS COVERAGE AND DISCUSS YOUR NEEDS WITH YOUR AGENT.

**POLICYHOLDER DISCLOSURE  
NOTICE OF TERRORISM INSURANCE COVERAGE**

You are hereby notified that under the Terrorism Risk Insurance Act, as amended, that you have a right to purchase insurance coverage for losses resulting from acts of terrorism, as defined in Section 102(1) of the Act: The term "act of terrorism" means any act that is certified by the Secretary of the Treasury-in concurrence with the Secretary of State, and the Attorney General of the United States-to be an act of terrorism; to be a violent act or an act that is dangerous to human life, property, or infrastructure; to have resulted in damage within the United States, or outside the United States in the case of certain air carriers or vessels or the premises of a United States mission; and to have been committed by an individual or individuals as part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the United States Government by coercion.

YOU SHOULD KNOW THAT WHERE COVERAGE IS PROVIDED BY THIS POLICY FOR LOSSES RESULTING FROM CERTIFIED ACTS OF TERRORISM, SUCH LOSSES MAY BE PARTIALLY REIMBURSED BY THE UNITED STATES GOVERNMENT UNDER A FORMULA ESTABLISHED BY FEDERAL LAW. HOWEVER, YOUR POLICY MAY CONTAIN OTHER EXCLUSIONS WHICH MIGHT AFFECT YOUR COVERAGE, SUCH AS AN EXCLUSION FOR NUCLEAR EVENTS. UNDER THE FORMULA, THE UNITED STATES GOVERNMENT GENERALLY REIMBURSES 85% OF COVERED TERRORISM LOSSES EXCEEDING THE STATUTORILY ESTABLISHED DEDUCTIBLE PAID BY THE INSURANCE COMPANY PROVIDING THE COVERAGE. THE PREMIUM CHARGED FOR THIS COVERAGE IS PROVIDED ABOVE AND DOES NOT INCLUDE ANY CHARGES FOR THE PORTION OF LOSS THAT MAY BE COVERED BY THE FEDERAL GOVERNMENT UNDER THE ACT.

YOU SHOULD ALSO KNOW THAT THE TERRORISM RISK INSURANCE ACT, AS AMENDED, CONTAINS A \$100 BILLION CAP THAT LIMITS U.S. GOVERNMENT REIMBURSEMENT AS WELL AS INSURERS' LIABILITY FOR LOSSES RESULTING FROM CERTIFIED ACTS OF TERRORISM WHEN THE AMOUNT OF SUCH LOSSES IN ANY ONE CALENDAR YEAR EXCEEDS \$100 BILLION. IF THE AGGREGATE INSURED LOSSES FOR ALL INSURERS EXCEED \$100 BILLION, YOUR COVERAGE MAY BE REDUCED.

**NOTICE:**

- 1. THE INSURANCE POLICY THAT YOU ARE APPLYING TO PURCHASE IS BEING ISSUED BY AN INSURER THAT IS NOT LICENSED BY THE STATE OF CALIFORNIA. THESE COMPANIES ARE CALLED "NONADMITTED" OR "SURPLUS LINE" INSURERS.**
- 2. THE INSURER IS NOT SUBJECT TO THE FINANCIAL SOLVENCY REGULATION AND ENFORCEMENT THAT APPLY TO CALIFORNIA LICENSED INSURERS.**
- 3. THE INSURER DOES NOT PARTICIPATE IN ANY OF THE INSURANCE GUARANTEE FUNDS CREATED BY CALIFORNIA LAW. THEREFORE, THESE FUNDS WILL NOT PAY YOUR CLAIMS OR PROTECT YOUR ASSETS IF THE INSURER BECOMES INSOLVENT AND IS UNABLE TO MAKE PAYMENTS AS PROMISED.**
- 4. THE INSURER SHOULD BE LICENSED EITHER AS A FOREIGN INSURER IN ANOTHER STATE IN THE UNITED STATES OR AS A NON-UNITED STATES (ALIEN) INSURER. YOU SHOULD ASK QUESTIONS OF YOUR INSURANCE AGENT, BROKER, OR "SURPLUS LINE" BROKER OR CONTACT THE CALIFORNIA DEPARTMENT OF INSURANCE AT THE FOLLOWING TOLL-FREE TELEPHONE NUMBER: 1-800-927-4357. ASK WHETHER OR NOT THE INSURER IS LICENSED AS A FOREIGN OR NON-UNITED STATES (ALIEN) INSURER AND FOR ADDITIONAL INFORMATION ABOUT THE INSURER. YOU MAY ALSO CONTACT THE NAIC'S INTERNET WEB SITE AT [WWW.NAIC.ORG](http://WWW.NAIC.ORG).**
- 5. FOREIGN INSURERS SHOULD BE LICENSED BY A STATE IN THE UNITED STATES AND YOU MAY CONTACT THAT STATE'S DEPARTMENT OF INSURANCE TO OBTAIN MORE INFORMATION ABOUT THAT INSURER.**
- 6. FOR NON-UNITED STATES (ALIEN) INSURERS, THE INSURER SHOULD BE LICENSED BY A COUNTRY OUTSIDE OF THE UNITED STATES AND SHOULD BE ON THE NAIC'S INTERNATIONAL INSURERS DEPARTMENT (IID) LISTING OF**

**APPROVED NONADMITTED NON-UNITED STATES INSURERS. ASK YOUR AGENT, BROKER, OR "SURPLUS LINE" BROKER TO OBTAIN MORE INFORMATION ABOUT THAT INSURER.**

**7. CALIFORNIA MAINTAINS A LIST OF APPROVED SURPLUS LINE INSURERS. ASK YOUR AGENT OR BROKER IF THE INSURER IS ON THAT LIST, OR VIEW THAT LIST AT THE INTERNET WEB SITE OF THE CALIFORNIA DEPARTMENT OF INSURANCE: WWW.INSURANCE.CA.GOV.**

**8. IF YOU, AS THE APPLICANT, REQUIRED THAT THE INSURANCE POLICY YOU HAVE PURCHASED BE BOUND IMMEDIATELY, EITHER BECAUSE EXISTING COVERAGE WAS GOING TO LAPSE WITHIN TWO BUSINESS DAYS OR BECAUSE YOU WERE REQUIRED TO HAVE COVERAGE WITHIN TWO BUSINESS DAYS, AND YOU DID NOT RECEIVE THIS DISCLOSURE FORM AND A REQUEST FOR YOUR SIGNATURE UNTIL AFTER COVERAGE BECAME EFFECTIVE, YOU HAVE THE RIGHT TO CANCEL THIS POLICY WITHIN FIVE DAYS OF RECEIVING THIS DISCLOSURE. IF YOU CANCEL COVERAGE, THE PREMIUM WILL BE PRORATED AND ANY BROKER'S FEE CHARGED FOR THIS INSURANCE WILL BE RETURNED TO YOU.**

**Date:** \_\_\_\_\_

**Insured:** \_\_\_\_\_

**END**