Developing a Pediatric Pain Program – A Workshop

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Objectives

At the end of this workshop, the participant will be able to:

- **Describe institutional needs and potential stakeholders.**
- **Present appropriate staffing and clinical care solutions.**
- **Identify components of a successful QA/QI program.**

Needs Assessment I

Systematic assessment of

- Current practice of pain management
- Desirable practice of pain management

- Identify stakeholders – survey and/or meeting

- SWOT Analysis
  - Strengths
  - Weaknesses
  - Opportunities
  - Threats

→ **Survey or 1st meeting**

Who are the Stakeholders?

- Acute postoperative pain management:
- Surgeons, anesthesiologists, PACU and floor nursing, pharmacist, PT, OT, administrator

- Comprehensive Inpatient Pain Service
- As above, plus ED physicians and nurses, IV teams, potentially interventional teams

- Comprehensive Pain Program including Palliative Care and Chronic Pain Management
- As above, plus additional nursing, psychology, psychiatry

Establishing Scope of Practice and Clinical Responsibilities

Evaluate current pain management practices

- Assessment of pain:
  - When? How? By whom?
- Treatment of pain:
  - Responsibility of order/prescription writing
    - Variability in practice between providers
    - Chains of communication

Needs Assessment II

- Identification of desirable changes
- Prioritize changes
  - Low–hanging fruit
  - Regulatory requirements (JAHCO, FDA, etc)
  - Feasibility
    - Staffing
    - Financial limits
  - Press Ganey Scores – get administrators on board

Meeting of Stakeholders to assure buy-in

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The Ideal Pediatric Pain Service

Clinical Service Provision

- Availability
- Contactability
- Regular patient review
- Continuity of Care

The Ideal Pediatric Pain Service

Charting, prescription and documentation

- Pain and sedation scores
- Prescription charts
- Treatment plan
- Discharge advice and follow-up

Education

- Nursing
- Medical staff
- Trainees, senior staff
- Allied health providers
- Parents and children
- General public

Quality Improvement and Research

Periodic assessment

- Strength and weaknesses
- Identification of key performance indicators
- Chart reviews and surveys
- Adverse events and complaints

- Research

Establishing Scope of Practice and Clinical Responsibilities

Evaluate current pain management practices

- Assessment of pain: When? How? By whom?
- Treatment of pain:
  - Responsibility of order/prescription writing
    - Variability in practice between providers
    - Chains of communication
- Prioritize desired changes – implement changes

Business Plan

- Setting goals
- Defining how to reach these goals

- External Stakeholders:
  - Patients (customers)
  - Administration (financier/investors)

- Financial plan with budget
  - Expenses…Staff, location, equipment
  - Income….billing, grants, foundation support

Establishing the Scope of Practice

- Acute Postoperative Pain Service
  - Primarily regional analgesia
    - *Part-time anesthesiologist with/wo nurses*
- Comprehensive Inpatient Pain Service
  - *Anesthesiologist with NPs, resident, fellow*
- Outpatient Pain Clinic - interdisciplinary
  - *Anesthesiologist, PT, Psychologist, NP/resident/fellow, nurse, coordinator*

Acute Postoperative Pain Service Staffing Model I (average census <20 patients)

- 1 anesthesiologist (part-time) and 1 nurse/PA/NP
  - Coverage Mo – Fri; cross-cover from OR on weekends and nights

- Anesthesiologist (income: $320 K / yr)
  - Mo - Fri 1/2 days for 52 wks/yr (260days/year ÷ 2 = 130 days)
  - 1 anesthesiologist works 188 days/yr (4 days/wk for 47 wks)
  - You will need 0.7 FTE = $ 224 k / year

- Nurse/PA/NP (income 60 – 100 K / year)
  - Mo – Fri for 8 hrs/d x 52 wks: 2,080 hrs/yr
  - 1 Nurse works 1,880 hrs/yr (minus vacation, educational time, etc)
  - You will need 1.1 FTE = $ 66 – 110 K / year

- Combined cost: between $ 290 to 350 K / year

Acute Postoperative Pain Service Staffing Model II (average census < 30 patients)

- 1 anesthesiologist and 2 nurse/PA/NP (2-4 h overlap in shift)
  - Coverage 7 days/wk; weekend rounds plus call from home

- Anesthesiologist (income: $320 K / yr) (188 days/yr)
  - Mo - Fri for 52 wks/yr (260 days/year)
  - Sa – Sun for 52 weeks (104 call /days; 3 hrs in-house for rounds)
  - You need ~1.9 FTE : $ 600 k+ / yr plus call

- 2 Nurse/PA/NP's (income 80 K / year) (1,880 hrs/yr)
  - Mo – Fri for 8 hrs/d x 2 x 52 wks: 4,160 hrs/yr
  - Sa –Sun 1 nurse for 8 hrs/d x 104 days : 832 hrs/yr
  - You need to cover 4,992 hrs/year and 2.7 FTE = $ 220 k/yr

- Combined cost: $ 800 k to 1 Mill / year

How many physicians do I need? - I

- You need 1 anesthesiologist 7 d/wk (260 weekdays and 104 weekend days)
- Your clinical commitment: 4 d/wk. You work 188 days/year
- 4 physicians will work 1 wk/mo (really 13 wks/yr) on service
- Each will be 65 weekdays on service, leaving 123 days or 3.2 days/ non-service weeks for clinical activities. Call: 24 weekend days.
- Your group will be short 1.4 people for weekday coverage . You also need replacement for 96 weekend call days.

How many physicians do I need? - II

- Your colleagues only want to spend 6 (8) weeks on pain service.
- You will do 12 weeks/year

- You need at least 7 (5) other people to join you.

Interdisciplinary Pain Clinic Staffing Model

- 1 anesthesiologist; 1 nurse, 1 NP, 1 psychologist; 1 PT, 1 office assistant
- Clinic open 1 – 4 days/week x 52 wks/yr (52 – 208 days/year)
  - 8 – 32 hrs/wk x 52 wks/yr (416 – 1664 hrs/yr)

Clinic Staff for 1-4 days/week	FTE	Salary $ 1k/year	Your costs $ 1K/year
Anesthesiologist	0.3-1.1	320	96-352
Nurse	0.2-0.9	60	15-54
NP	0.2-0.9	100	20-90
PT	0.2-0.9	80	16-72
Psychologist	0.3-1.1	70	21-77
Office Assistant	0.2-0.9	35	7-32
All			**175-677**

Data based on national averages in 2013

How many patients can I see?

- New Patient Evaluation (in the morning)
- 3 - 4 Providers (anesthesiologist/NP , psychologist, PT)
- Each patient is seen by MD, PT, Psych - 30-60 min/provider
- 3-4 simultaneous evaluations within 3+ hours

- F/u Established Patient (in the afternoon)
- Patient seen by 1-3 providers based on need – 30-45 min
- 3-6 serial and/or simultaneous evaluations

- Requirement: 3 evaluation rooms
  - Potentially plus treatment room and recovery room

Pain Clinic Census

- Daily clinic census: 6 -10 patients /day
- Projected yearly census >300 (150 new) patients /clinic day
- More realistic: > 200 (100 new) patients/clinic day

- Things to ponder :
- New Evaluations: level 4 or 5 consult *(comprehensive / time-based 60 min)*
  - Significant medical record review required prior to patient visit
  - Consultation vs. Management and Care Coordination
  - “Needy” patients and families

- **How many patients can one MD see, treat and follow?**

Income – Billing – Collecting
Inpatient Pain Service

Codes	Collections $	% of Charges
Management/drug administration	120	52
Subsequent hospital care I -III	40 - 120	36 -52
New/Established patient consult I - V	50 - 280	33 - 56

Last year you saw 1000 new patients – about 33% with regional techniques

Charges $	Collections $	Gross collection	Net collection
800 K	**380 K**	49%	99%

You feel you need to grow your service now

Growing your service

- You like to go from a PT physician with 1 NP for 8h/d to:
- FT physician with 1 NP for 12 hrs/d and 8 hrs/d on weekends. Call: cross-cover from OR
  - Physician 1.4 FTE @ 320K/yr = 442 K/yr
  - NP 2.2 FTE @ 95 K/yr = 209K/yr
- Increase in cost: $ 325K/yr to $ 651K/yr leaving you with a projected deficit of $ 317K /yr
- How are you going to solve this problem?

I need more staff - nobody seems to be listening to me…

- We have increased our patient census by …% but still have the same number of staff taking care of them…

VS

- Based on data from the last 2 years we are projecting an increase in the number of patients by …% per year. Current staffing will not allow us to take care of these patients. We may be losing business…

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
		18	37	23	27	39	20	29	18		22
13	26		28	17	29	33	22	31	14	29	22
12	25	25	21	19	26	31	22	26	15	33	22
22	25	23	20	27	26	16	21	18	23	32	17
24	22	23	24	26	18	20	23	15	24	30	21
23	22	20		28	21	34	22	11	26	23	20
22	17	17	27	22	27	37	15	16	24	23	22
19	22	18	32	19	26	39	20	12	20	34	23
17	31	17	22	22	26	30	26	17	16	42	30
15	31		18	26	26	25	36	17	14	47	29
23	27	35	20	29	21	23	43	14	23	36	23
31	21	31	23	24	15	29	37	17	29	33	20
32		25	28	17	13	36	26	15	27	26	25
30	21	23	30	17	31	40	15	25	30	23	32
23	20	27	21	15	26	39	25	28	25	24	33
19		27	23	18	36	34	23				
13	30	24		22		26	30				
12	25	21	21		26	26	30				
21	17	29	22	23	16		23	22	30	20	32
23	17	21	24	23	22	27	20	24	31	17	37
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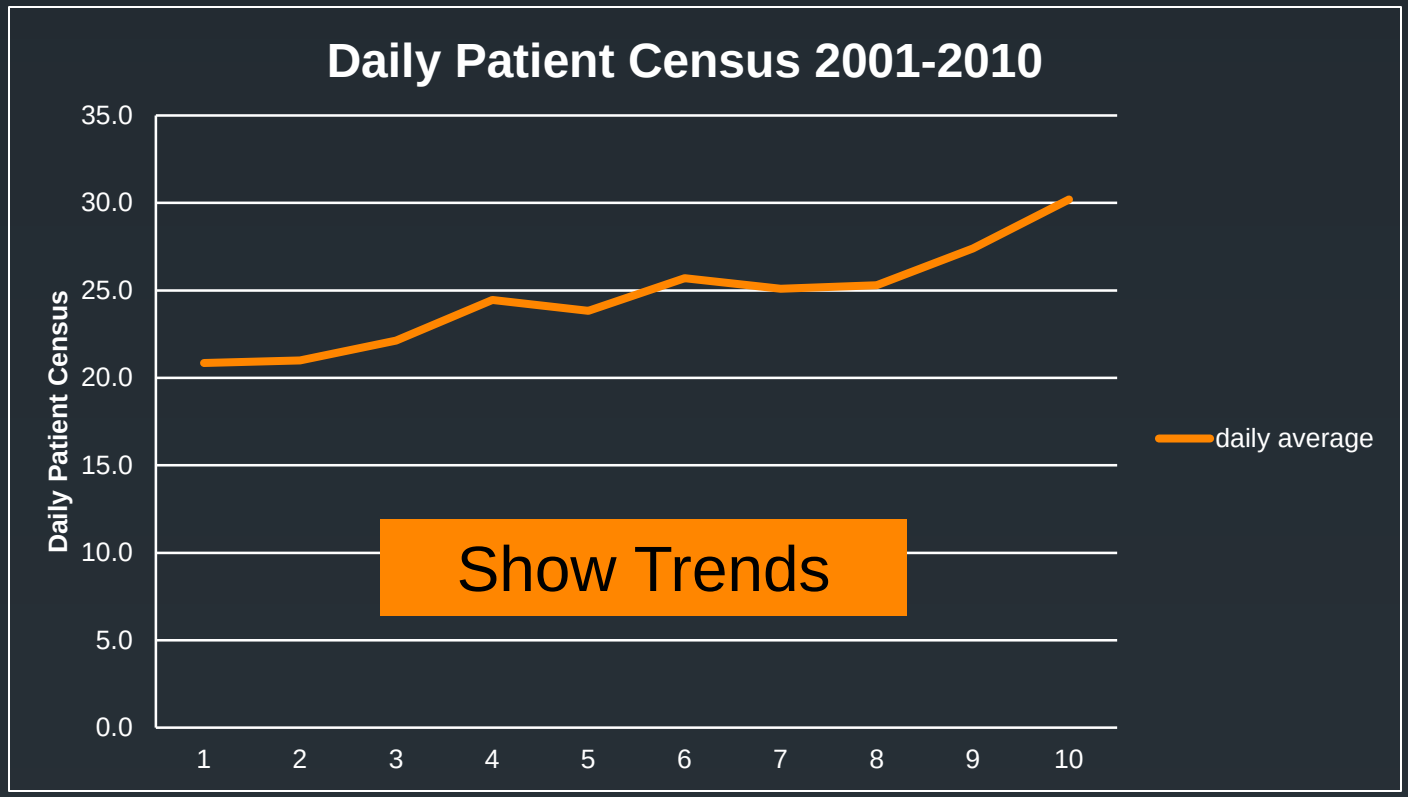
30	18	22	23	18	25	30	20	28	33	14	14
21	18		19	30	30	32	18	24		12	17
20		28		24	30	34	16	26	28	15	13
16		34	22	20	42	25	19	27	22	22	15
14		28		17		23	24		26		14
21.2	22.6	23.5	23.1	21.7	27.6	28.8	23.4	22.3	24.1	24.0	23.8

Pain Service Daily Census 2005

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
22	20	31	32	28	28	34	27	35		32	29
19	26		29	26	38	35	27	34	25	31	31
18		30	23	29	32	27	24	38	25	32	35
20	34	33	20	29	37	23	27	30	26	30	31
25	30	36	21	27	30	19	28	29	32	37	31
29		33	32	29	19	29	34	26	32	32	34
27	23	28	36	27	21	39	32		36	26	37
27	25	31	41	28	26	42	30	31	37	29	38
27	29	35	38	24	31	37	30		33	30	39
22		40	30	21	30	28	28	36	32	34	36
23	28	36	25	25	33	26	32	32	41	35	33
27	28	25	24	29	27	30	33	26	45	38	22
32	22	21	29	32	20	20	31	32	52	30	22
33	18	21	38		22	37	27	33	52	27	31
37	15	21	39	25	26	34	20	37	46	29	38
30	18	24	33	22	21	33	24	34	39	38	35
				29	21	24	33	34	39	36	38
				25	23	27	26	34	32	35	33	35
					25	35	25	34	38	32	41	34	32
26	20	21	30	34	21	37	38	27	44	30	28
	20	18	36	30	25	40	35	28	43	28	29
32	20	23	37	28	32	43	33	28	39	29	
29	26	23	39	26	40	45	35	30	33	37	
24	35	33	32	24	39	36	39	38	33	40	18
19	32		29	34	40	22	40	30	32		
23	36	41	27	37	32	22	42	33	31	32	
29	31	31	36	38	25	28	44	36	36	26	15
37	29	23	33	31	28	33	33	35	40	23	23
37		23	36	27	28	32	31	38	46	22	24
33		28	33	15	33	39	33	38	41	25	22
22		32		14		33	33		35		16
26.4	25.6	28.4	31.2	27.2	28.6	32.1	32.1	32.7	37.2	31.2	29.3
4828	4	4828	3333	6667	6667	2903	2903	5	6667	7586	8462

Pain Service Daily Census 2010

Use Visual Aids



- Daily patient visit (rounding) - 5 -10 min/patient
  - For 20 patients: 1:40 to 3:20 hours (minus walking, elevators, etc.)
  - For 30 patients: 2:30 to 5 hours
  - For 40 patients: 3:20 to 6:40 hours

Identify Risks

- **Quantity over quality:**
  - Large daily patient census - limited time available for each individual patient - less than optimal care.
  - High acuity patients with rapid throughput
- **Timeliness of services:**
  - Time required to respond to calls – complains
- **Loss of revenue:**
  - Limited staff does not have the time to document sufficient details in each patient's consult and daily notes to assure billing at higher level.
- **Increased liability:**
  - Diminished time available to provide care for each patient as well as limited documentation may result in increased risk in case of adverse events.

Finally: The Happy Meal

Parents don’t’ go to a Fast Food Place to buy a hamburger patty, they ask for the “Happy Meal”

Pain Management may be equivalent to the bun or the ketchup but it is part of the deal.

(Liberally quoted: Eric Jackson, Jr, M.D. MBA)

Helpful References

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