The Intensive Ambulatory Care Service
(IACS aka “Homecare”)

Serving Children with Complex Medical Needs

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Objectives

- To take you on a whirlwind tour of IACS
- How did the program start?
- How does the program work?
- How effectively do we meet our care objectives?
- What are our strengths and challenges?

Start of IACS
somedays it feels like forever….

But really, it was 1964

Nelson Mandela imprisoned for opposing Apartheid

1964

US Surgeon General warns against cigarette smoking

"...not a creature was stirring..."

(None, save the doctor going out on a call.)

According to a recent nationwide survey:

MORE DOCTORS SMOKE CAMELS THAN ANY OTHER CIGARETTE

YOUR "T-ZONE" WILL TELL YOU...

T for Taste...

T for Throat...

Camels Costlier Tobaccos

THE BEATLES IN AMERICA 1964

PHOTO COURTESY "THE BEATLES ARE COMING" by Bruce Spizer

Children were hospitalized for long periods
Parents were visitors

And in a little corner of Montreal….

- A few avante-garde nurses and doctors
- Firm, fixed belief that children with complex needs could be cared for at home
- By their parents
- With the support of a hospital team

Early IACS Philosophy

- Prolonged hospitalizations were detrimental to children and their families
- Parents willing and capable of providing complex care in their own homes
- Comprehensive and coordinated care crucial for children with special health care needs
- First patient groups served; those with: rheumatological, neuromuscular, asthma and hematological disorders

IACS Today

- Still in the business of providing comprehensive, coordinated care
- Nurse case managers
- Strong generalist philosophy
- Transdiagnostic care
- Serving children with diverse medical conditions
- Combined services: day treatment centre and “medical home”
- Collaborative care with subspecialists and community providers

Intensive Ambulatory Care Service (IACS)
Service de soins ambulatoires intensifs (SSAI)
“Homecare”

IACS is a medical home
(experienced, not perfect, but trying to improve…)

A216

One narrow corridor

Day treatment Centre – Medical Home

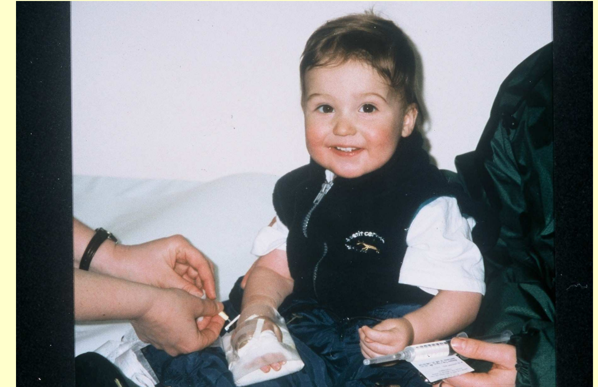
Follow over 800 children/families annually

Mix of pediatric and adult care

All have complex needs

Short, medium and long term care

IACS
Short term/Day hospital services



- IV antibiotics to avoid or shorten hospitalization duration (200+/yr)
- Transfusions/ infusions
- Rapid assessment daily clinic
- Coordination with community services

IACS – Medium Term Services

- Long term IV program; use of PICC lines, portable IV pumps
- For children with osteomyelitis, deep seated infections, immunocompromised children
- Complex care consults
- 50+ children/year

- Parents/children are taught how to administer antibiotics
- Home support
- Coordinated f/u with community providers (CLSC)

Long term care

Medical Home Services – admission by referral "complexity"/ use of technology gets you in!

- BPD & Home oxygen
- Tracheostomy
- Home BPaP, Ventilation
- Neuromuscular conditions
- Heart and Liver transplant
- Home enteral feeding
- Complex care
- Hemophilia
- Thalassemia
- Von Willebrand
- HIV/ Immunocompromised
- Home palliative care
- Home SCIG

Commonalities in a Diverse Population
(short, medium, longterm care groups)

- Home is preferred location for care
- Parental involvement high
- Medical fragility (home – IACS – ICU)
- Complexity of care
- Use of special medications, technology
- Multiple care providers in multiple locations
- Coordination required for successful care

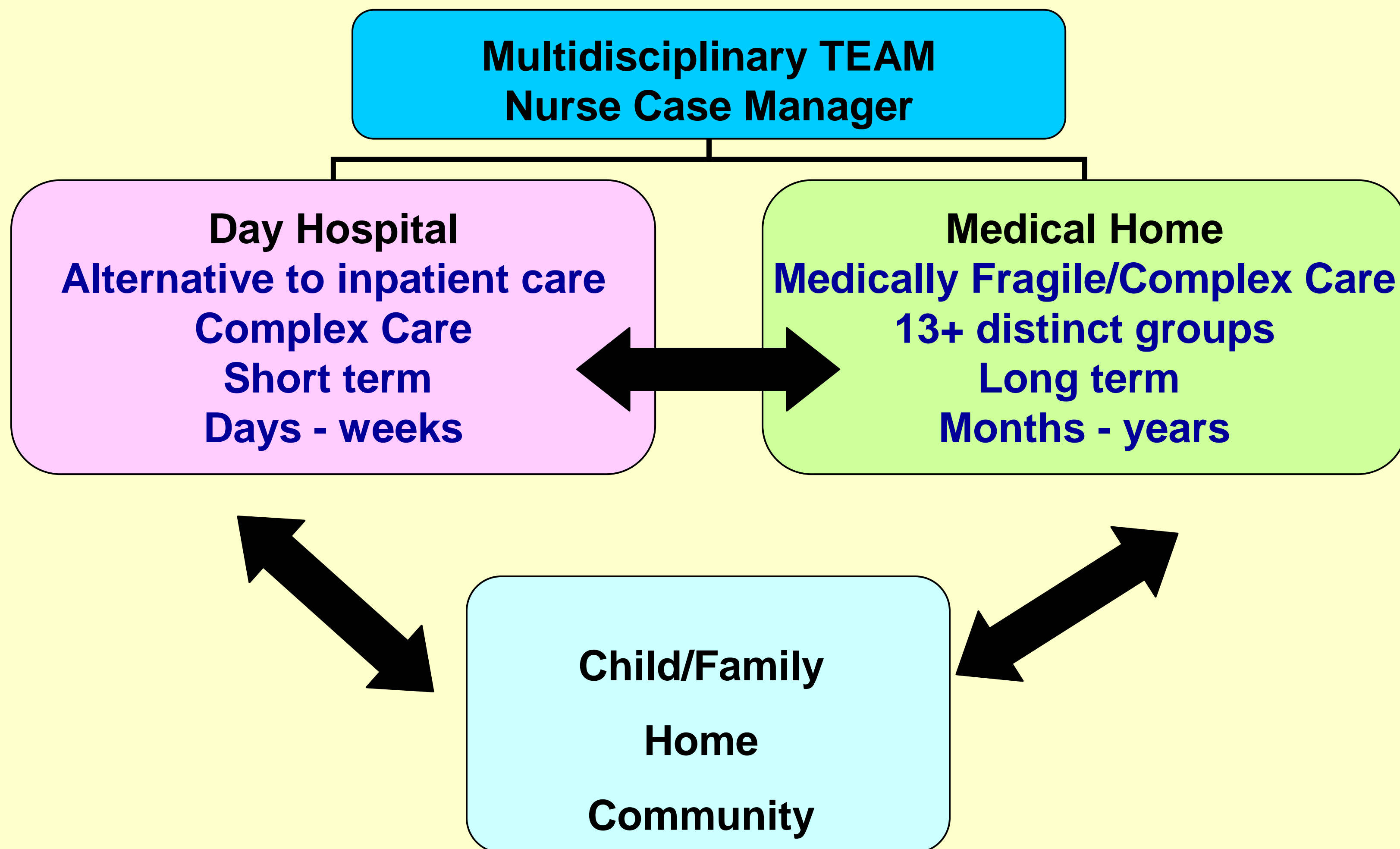
One core team – Shared vision

1. Improve QOL of children with complex medical conditions
   - Maintain/encourage child/family autonomy
   - Minimize impact of illness
   - Encourage growth/development of every child

2. Decrease unscheduled hospitalizations and ED visits

3. Coordinate the needs of the child/family with home, community and hospital services

IACS Basic Structure – Expected View



IACS Basic Structure: How we really see it

Striving to provide strong generalist care in a high tech, high specialty era

Roberts KB, Who's worrying about the children and what are they doing about it? Ambulatory Pediatrics Vol 6. No 5. October 2006

Comments from presidential address APA
Steve Ludwig

Day hospital – Medical home Complementarity
Why it works for us….

- **Commonalities**
  - **Home/community usually preferred location for care; whether short or longer term**
    - **“Well-oiled” community referral program**
    - **Linked to educational outreach/ promotes ↑ referrals**
  - **Complex care requires**
    - **High availability for urgent visits avoiding ED**
    - **24/7 telephone support (RN & MD) for both families and community service providers**
  - **Use of technologies commonplace**
    - **Portable pump devices (IV, SC, NG, G-tube, etc)**
    - **Concentrated expertise**

Day hospital – Medical home complementarity
Why it works for us….

- Maximizes productivity with flexibility in the face of realities…
  - Chronic nursing and medical staff shortages
  - Variable/unpredictable work volumes – day hospital activities even out the less predictable care needs of those in the long term care groups
  - Allows for regular staffing for urgent care visits (M-F; ½ day on weekends)
  - Minimizes "burn-out" by balancing long term intensive child/family encounters with shorter term encounters
  - Supports seamless care; many "medical home" patients benefit from "day hospital" services

Markers of Effectiveness

Required care is successfully & safely delivered

- After hours 1000+calls /year to 24/7 line; personalized care allows for focused "trouble-shooting"
- Individual program markers eg. Successful completion of prescribed therapy (long term home IV)
- Low infection rate in central lines maintained at home (1 per 5 years or less)
- Rare circumstances where "home care" is not feasible (social or medical circumstances)
- Quality of life studies ongoing (SCIG program)

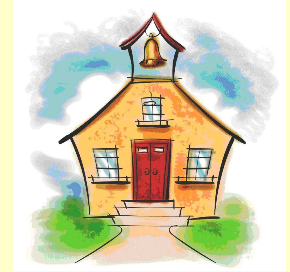
Markers of Effectiveness

Children sleep at home, as much as possible

- **Approximately 800 medically fragile pts followed per year**
- **With turnover of 300 pts/year**
- **Fiscal year 2006-7;**
- **32 admissions in 22 pts**
- **22/32 were planned admissions**
- **10/32 urgent, unplanned admissions through ED**

Fewer and shorter hospitalizations

Markers of Effectiveness



Children go to school, as much as possible

- **Almost all school aged children in developmentally appropriate learning environment**

Parents are supported as primary caregivers

- **Parental satisfaction surveys (short and medium term care groups) indicate that "out of hospital" care highly appreciated**
- **Planned survey in 2008-9 of parents from long term care groups**

Challenges: Short & Medium Term Services

- **Community knowledge, skills, comfort with complex pediatric care** (not just little adults)
- **Technical issues (IV access in very young children)**
- **Timelines for rapid transition to community services** (daily deadlines, no weekend referrals)
- **Costs for families; can be deciding factor**

IACS Challenges: Long Term Services

(do you have a few days?)

Basics – Patients, Staff and Space

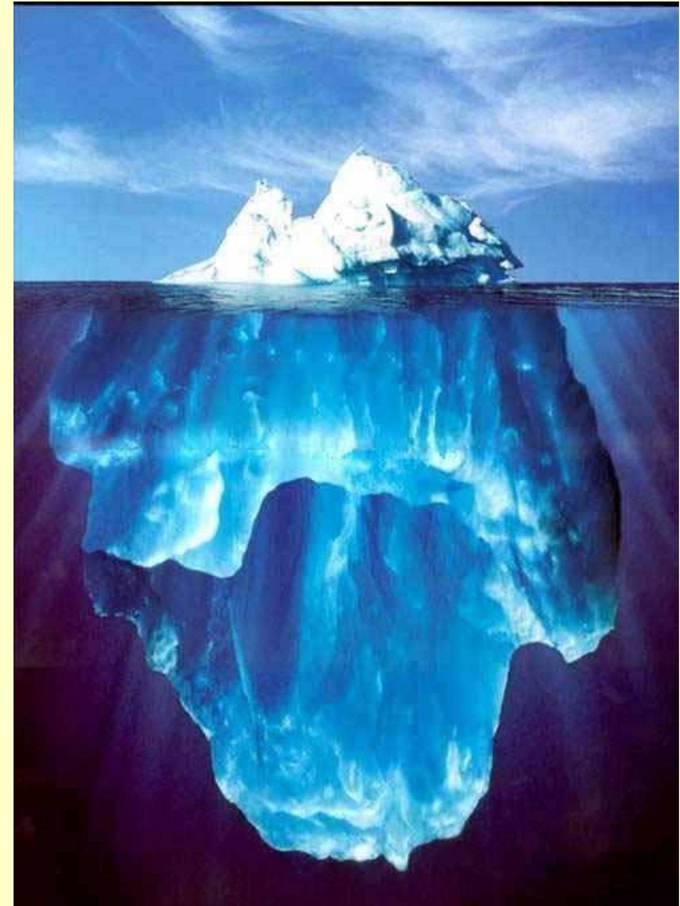
- **Personnel shortages – philosophy of supporting individuals to do their best work**
- **Physical space limitations – mainly for day treatment centre functions but also for scheduled clinics**
- **Rapidly growing populations of children with complex needs eg. BPD program tripled in size**

Challenges for comprehensive, coordinated care in Canada

- **Lacking a national framework of care, including definitions, population data, standards of care, evaluation tools (some in progress…)**
- **Connecting stakeholders with the issues so that issues can be solved collaboratively**
- **Need coordinated government support – inter-ministry, intra-ministry**
  - **Eg. Negative financial incentives for parents to care for child at home; though this creates tremendous hospital savings**
- **Administrative accountability (↑visits ≠ success)**
- **Transitions challenging…**

Care Transition Challenges

- Lack of similar coordinated adult services that are not single disease oriented
- Lack of medical expertise in “new” conditions; eg. adults with congenital muscular dystrophies
- Chasm in understanding between pediatric and adult care (we don’t get what they do; they don’t get what we do!)
- Lack of awareness of the UNIQUE needs, development and maturity of the chronically ill young adult
- And that’s just transition to adult services, consider also transitions to home, school, community programs, etc.



Strengths

- Common vision of care
- Solid teamwork
- Philosophy of collaboration
- Transdisciplinary care
- Nurse case-managers
- Cross-training
- 24-7 coverage

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Thank you!