Cabin Fever 2010

Multi-level teaching and ICC students:
Two resident's perspectives

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Objectives

- Background
- Review Cabin Fever 2009 presentation
- Current curriculum requirements
- Barriers/Drawbacks and Advantages
- Suggestions

History of the ICC

More learners in medical school
- Expansion to 180 students at U of C for class of 2012
- Expansion to 188 students at U of A for class of 2013

Development of RICC

- 32 week longitudinal preceptor-based clerkship
- U of A started the RICC in Fall 2007 with 7 students
- U of C started their RICC program in Spring 2008 with 10 students

U of C RICC Sites

Drumheller *
Sundre
High River *
Pincher Creek*
Taber*
Canmore
Blairmore (2010)*

U of A RICC Sites

Edson
Hinton
Rocky Mountain House
St. Paul
Sylvan Lake

Expansion residency programs

Rural Alberta South
- Increased to 14 residents 2009

Rural Alberta North
- Red Deer 10
- Grande Prairie 6

Calgary Urban
- Quota of 34 in 2010

Edmonton Urban
- Quota of 44 in 2010

Cabin Fever 2009

Survey of rural residents presented

Most residents enthusiastic to have students at same site(5.9 on 7 point scale)

Fewer residents enthusiastic to have same preceptor as student (4.2 on 7 point scale); most concerned about sharing procedures

Few residents felt there were enough teaching opportunities

R2s felt more comfortable than R1s with teaching

If teaching occured it was in the ER

Sharing sites - What does this mean?

Expectation of 1:1 teaching:learner ratio in rural sites

Sharing preceptors, teaching opportunities

Preceptor burnout

Demand on communities

New developments in the family medicine curriculum

Part of resident curriculum is to teach
- Lots of evidence about teaching residents to teach but little evidence about how to put in to practice

2 X 3hr sessions on teaching residents to teach
- 1 minute preceptor
- Providing feedback

New developments in the family medicine curriculum

Continuity

"red book" requirements

Evidence for continuity

Review of 101 data-based research articles (1990-1994),

Education in ambulatory care clinics is characterized by variability, unpredictability, immediacy, and lack of continuity.

Learners often see a narrow range of patient problems in a single clinic and experience limited continuity of care. Few cases are discussed with attending physicians and even fewer are examined by them.

Evidence for continuity

Review of 101 data-based research articles (1990-1994),

Recommend longitudinal teaching programs

Recommend facilitating learning by:
- increasing continuity-of-patient-care experiences
- increasing contact with faculty members
- encouraging collaborative and self-directed learning
- providing faculty development
- strengthening assessment and feedback procedures.

(Perceived) Drawbacks of Multi-level Learning

Student
- Less exposure to procedures/learning opportunities
- Less time with preceptors - CaRMS letters, etc
- Bottom of the hierarchy
- Observed less

(Perceived) Drawbacks of Multi-level Learning

Resident
- Must share procedures/learning opportunities
- Takes more time
- Not born teachers
- Arrive and leave at different times than the students

(Perceived) Drawbacks of multi-level learning

Preceptors
- Time - pressure to get through list
- Productivity concerns
- Less money
- More work
- Burn out if constantly teaching

(Perceived) Drawbacks of Multi-level Learning

Clinic
- Space
- Staffing issues
- Scheduling issues
- Patient consent
- Orientation of learners

Advantages of Multi-level Learning

Student
- Resident as a more patient teacher
- Working with someone who was just in same situation
- Peer-level mentor
- More likely to be teach as resident
- Less intimidating
- Better social life

Advantages of Multi-level Learning

Resident
- Reinforce principals
- Encourages us to review topics
- Encourages us to be systematic and think about approach
- Fulfills curriculum
- Helps us become better doctors
- More likely to be preceptors when we're done
- More thorough history/physical exam via observation

Advantages of Multi-level Learning

Preceptors
- Share supervision of student
- More time for paperwork/sleep
- Reward in seeing resident excel at teaching
- Inspire future family physicians

Clinic
- Dynamic environment
- Patient centered care

Ideal multi-level learning environments

No decreased productivity

Residents feel rewarded, meeting curriculum requirements, feel as though they aren't losing out on opportunities, inspired to do more teaching

Learners are inspired, more bedside and didactic teaching

In reality

Some residents experiences with ICC students

OB call - division of OB call schedule
ER - no schedule, lots of opportunities
Office - few opportunites
Didactic teaching - lunch time teaching sessions

In reality

Some of the negative experiences with ICC students:

Little opportunity to teach or even run into each other
Students avoid residents "stepping on toes"
No one wants to share procedures
Schedules/preceptors completely different
Preconception - 1:1 teacher:learner
Turnover - RIC stay 8/12, residents 2/12 or 4/12, other students 1/12

Do resident’s need to shift their expectations?

As rural residents we want to :
- be independent
- not burden our preceptors with too many questions
- not decrease productivity
- not wake our preceptors up
- save time for our patients

*Evidence suggests that presenting patient with preceptor in room does not save time but does create postive dynamic between patient/preceptor/learner

Ideas to Improve Multi-level Teaching

Areas to Address for Improvement

Rural program - Appear to have less scheduled teaching time in terms of didactic teaching/ward rounds/bedside teaching compared to urban programs

2 X 3hr sessions on teaching residents to teach
Good theoretical approach but does not substitute for real opportunities

To increase success of residents as teachers

Teaching goals discussed at beginning of rotation

Observation of resident of their own skills

Observation of their teaching techniques

Integration of continuity

Important to give time away from clinical experiences to teach to show that teaching is just as important as providing patient care

*evidence shows that in clerkship, clinical competence is not directly related to number of encounters; more importantly good supervision directly impacts student's learning and positively influences patient encounters

Multi-level teaching in the office

Not everyday but 1/2 to full day per week

Ideal office setup would be 2 - 3 exam rooms

Work off preceptors patient list (not off walk-in list)

Find/book patients who have interesting hx and P/E findings

Book variety of office visits: complete, Rx refill, HTN, prenatal, DM, lab recalls (follow up), asthma, COPD

Suggestions for scheduling multi-level teaching in the office

Scheduling - need help of staff
* One study looked at preceptor time spent with patient when a learner was working with them and without

With clerk: The total time per patient encounter was 23.7 minutes, 11.7 minutes of which directly involved the preceptor.

No clerk: preceptors on their own took an average of 10.6 minutes

The 1.1-minute difference was not statistically significant as measured by t-test ($p < .05$)

Suggestion scheduling -

Time	Room 1 - Preceptor	Room 2 - Student and Resident
0900	Patient A	Patient B
0915	Patient C	Patient B
0930		Patient B together

Adapted from UBC's Teaching Skills for Community Based Preceptors

Suggestions for multi-level teaching during a periodic health review

Resident and student go in together
Take history/ROS
Discuss preventative health care
Identify problem list

Patient changes

Student and staff person go in together for physical exam
Teach/Observe physical exam in steps
Options for resident - see new patient or get labs/investigations/RX together
Incorporate feedback with each patient seen

Suggestions for multi-level teaching in the ER

- Set goals/find out level of skill early
- Give clerk time to do hx/physical and dvlp plan
- Realize resident may lose efficiency but will be able to go over admission orders or management plan or pharmacology on cases with clerk when ER less busy
- As ER gets busier, clerk spends more time observing or working directly with preceptor while resident works independently

Suggestions

- OB call - together vs separate

Suggestions

- Bedside teaching
  - Have resident pick interesting patient case or physical findings
  - Give them 1 hour away from clinic to discuss
  - Review/discuss generated data and management
  - Observed history, physical exam or procedures
- Evidence shows that bedside teaching helps to model professionalism, enhances clinical reasoning, demonstrates cultural norms of medical practice
- Allows learners to think about what they know in the context of a patient
- Patient gets to have role in teaching

Suggestions

- Didactic teaching - guidelines, interesting cases, SAMPs
  - Lunch or designated time during week
  - Resident as presentor/discussant/facilitator
  - Best to avoid lecturing
  - Have open ended questions
  - Encourage "doctor's lounge" environment

In Summary

- Enrollment increases, RICC development put pressure on number of learners in sites
- Curriculum development in residency includes teaching and continuity
- Many opportunities for residents to develop teaching skills outside of ER
- Make scheduled time for residents to practice being teachers

Resources

- BMJ
  - BMJ 2008;337:a1930 Teaching Rounds: Teaching on a ward round
  - BMJ 2008;336:384-387 Teaching Rounds: Teaching when time is limited
  - BMJ 2008;337:a1156 Teaching Rounds: Teaching in an ambulatory care setting
  - *BMJ* 2003;326:591-594 (15 March) Clinical Review: ABC of Teaching and Learning in Medicine
- J Adv Nurs. 2000 Apr;31(4):850-6. Situated learning in the practice placement
- Med Educ. 2006 May;40(5):450-8. Influence of clerkship experiences on clinical competence

Resources

Neurology. 1999 Jan 15;52(2):317-20. The use of "clinic room" presentation as an educational tool in the ambulatory care setting.

Evidence for continuity -
Acad Med. 1995 Oct;70(10):898-931.Teaching and learning in ambulatory care settings: a thematic review of the literature.

Medical Teacher 1992; 14(2/3)133-138