Curriculum Design for Rural Programs

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It's all about the **place**!

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…and adopting an **organic** approach

Place-based education

"A strategy that starts with place holds promise for a more organic, ecological and sustainable enterprise - medical education conceived, birthed, shaped and nourished in rural communities."

Longenecker, *Rural Medical Education: Practical Strategies*, 2011

Participants will be able to:

- Articulate at least 3 principles for place-based education, and applying the rules of accreditation in a unique rural place
- Describe a number of current and proposed innovations, including:
  - Longitudinal integrated clerkships, and rural streams in other specialties,
  - Integration of telemedicine and tele-education,
  - Virtual rural grand rounds

Challenges and Opportunities

- What makes curricular design for a rural place challenging?
- What opportunities do these challenges present?

Challenge

- Inexperience

Opportunity

- Learning together; teaching each other – ever the mind of a novice
- Active experimentation

Challenge

- Low volume of cases

Opportunity

- Longitudinal curricula
- Expanded scope of rotation
- Rolling jeopardy and home call ("capture the learning")

[Resident - Month Year]

Hospital Care

Duty hours begin at 0630

Revised 11-9-2010

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Week 1							
6:30 AM Hospital Rds. Mon-Sat.*		**MRH**	**MRH**	**MRH**	**MRH**	**MRH**	**MRH**
AM						**MRFP**	
Noon		Teaching Rds	Peds Teaching Rds	Residency Conf.	Clinical Jazz	Staff Mtg	
PM			**Emerg. Med.**** 6 hours	**MRFP**	1:30-2:30 CL Time		
Week 2							
6:30 AM Hospital Rds. Mon-Sat.*		**MRH**	**MRH**	**MRH**	**MRH**	**MRH**	**MRH**
AM						**MRFP**	**Emerg. Med.** 16 hours total
Noon		Teaching Rds		Residency Conf.	Clinical Jazz	MedNet	
PM			**Emerg. Med.**** 6-10 hours	**MRFP**	1:30-2:30 CL Time		
Week 3							
6:30 AM Hospital Rds. Mon-Sat.*		**MRH**	**MRH**	**MRH**	**MRH**	**MRH**	**MRH**
AM						**MRFP**	
Noon		Teaching Rds		Rural Grand Rounds	Clinical Jazz	MedNet	
PM			**Emerg. Med.**** 6-10 hours	**MRFP**	1:30-2:30 CL Time		
Week 4							
6:30 AM Hospital Rds. Mon-Sat.*		**MRH**	**MRH**	**MRH**	**MRH**	**MRH**	**MRH**
AM						**MRFP**	
Noon		Teaching Rds	OB Teaching Rds	Practice Management		Prac Mtg	
PM			**Emerg. Med.**** 6 hours	**MRFP**	1:30-2:30 CL Time		

*Morning Report @ 7:15

**Scheduling hours, even the scheduled day, is somewhat flexible; encouraged to go home by 8:30 PM, must be off duty by 10:30 PM

Challenge

- Few faculty

Opportunity

- Expanded scope of practice
- Continuity of relationship

Challenge

- Small number of learners

Opportunity

- Interprofessional education
- Apprenticeship; individualized education
- Field trips
- Faculty keep up their skills

Challenge

- Distance

Opportunity

- Autonomy
- Telemedicine and tele-education
- Travel

Place-based education

- Starts with a rural place and it's assets
- Uses various models, options for program design, modified rather than imposed upon the local context (organic medical education)

Place-based education

- Follows a developmental process that is community engaged, i.e. Community Engaged Medical Education (CEME)

  CERE-R: CEResidencyE for Rural Places

- The intention is not to circumvent the rules of accreditation, but to know them so well that you will be able to creatively adapt them to the rural context

The OSU Rural Program – Three Year Curriculum

Intensive immersion experiences embedded in a continuing rural practice

1	2	3	4	5	6	7	8	9	10	11	12	13

YEAR 1

Hospital Care (Shared)	Hospital Care	Pediatrics Inpatient	Hospital Care (NRP)	Special Care Nursery	OB – Newborn	Hospital Care	Cardiology	Hospital Care (Wound Healing)	MICU	Ho
MRH	MRH	CHC	MRH	OSUH	MRH	MRH	OSUH	MR		
Mad River Family Practice -- Periodic office patie										
2 Half-days	2 Half-days	1 Half-day	2 Half-days	1 Half-day	2 Half-days	1 Half-da				Half-days

YEAR 2

Ambulatory Cardiology	Elective	OB - Newborn	OB – Newborn						Medical Sub - specialty	Elective	GYN
MRH/Offic								MRH/Office	MRH/Office		Office
ice patient care, daily hospital rounds and Community Medicine											
					-days	8 Half-days one week None the next		4 half-days	4 Half-days	0-4 Half-days	3 Half-days

			ne, and	GYN	Elective	Surgical Subspecialiies – Opthalmology, ENT, Urology, Podiatry	Elective	Sports Medicine	Elective	Medical Sub - specialty
			Office	Office		Office		OSU Sports Ctr		MRH/Office
Mad River Family Practice -- Periodic office patient care, daily hospital rounds Practice Management and Community Intervention										
0-4 Half-days	5 Office Half-days			4 Half-days	0-4 Half-days	5 Office Half-days	0-4 Half-days	4 Half-days	0-4 Half-days	0-4 Half-days

[Gray shaded rotations occur at least in part in Columbus, Ohio]

"Intensive immersion experiences embedded in a continuing rural practice"

The OSU Rural Program – Three Year Curriculum

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1	2	3	4	5	6	7	8	9	10	11	12	13

YEAR 1

Hospital Care (Shared)	Hospital Care	Pediatrics Inpatient	Hospital Care (NRP)	Special Care Nursery	OB – Newborn	Hospital Care	Cardiology	Hospital Care (Wound Healing)	MICU	Hospital Care (ATLS)	Peds ER	Scholarly Activity (Shared)
MRH	MRH	CHC	MRH	OSUH	MRH	MRH	OSUH	MRH	OSUH	MRH	CHC	MRH
Mad River Family Practice -- Periodic office patient care, daily hospital rounds												
2 Half-days	2 Half-days	1 Half-day	2 Half-days	1 Half-day	2 Half-days	1 Half-day		2 Half-days	1 Half-day	2 Half-days	1 Half-day	3 Half-days

YEAR 2

Ambulatory Cardiology	Elective	OB - Newborn	OB – Newborn (High Risk Immersion)	Derma-tology	Pediatrics Outpatient	ICU – Intern Med	Orthopedics	Medical Sub - specialty	Elective	GYN
MRH/Offic		MRH	MRH	Office	Office	MRH	MRH/Office	MRH/Office		Office
Mad River Family Practice -- Periodic office patient care, daily hospital rounds Scholarly Activity and Community Medicine										
4 Office Half-days	0-4 Half-days	2 Half-days	2 Half-days	4 Half-days	2 Half-days	8 Half-days one week None the next	4 half-days	4 Half-days	0-4 Half-days	3 Half-days

YEAR 3

Elective	Geriatrics, Physical Medicine, and Psychiatry	GYN	Elective	Surgical Subspecialiies – Opthalmology, ENT, Urology, Podiatry	Elective	Sports Medicine	Elective	Medical Sub - specialty
	Office	Office		Office		OSU Sports Ctr		MRH/Office
Mad River Family Practice -- Periodic office patient care, daily hospital rounds Practice Management and Community Intervention								
0-4 Half-days	5 Office Half-days	4 Half-days	0-4 Half-days	5 Office Half-days	0-4 Half-days	4 Half-days	0-4 Half-days	0-4 Half-days

[Gray shaded rotations occur at least in part in Columbus, Ohio]

Methods

- Emergent curricular strategies
- Longitudinal design
- Tele-education

Methods – Emergent Curricula

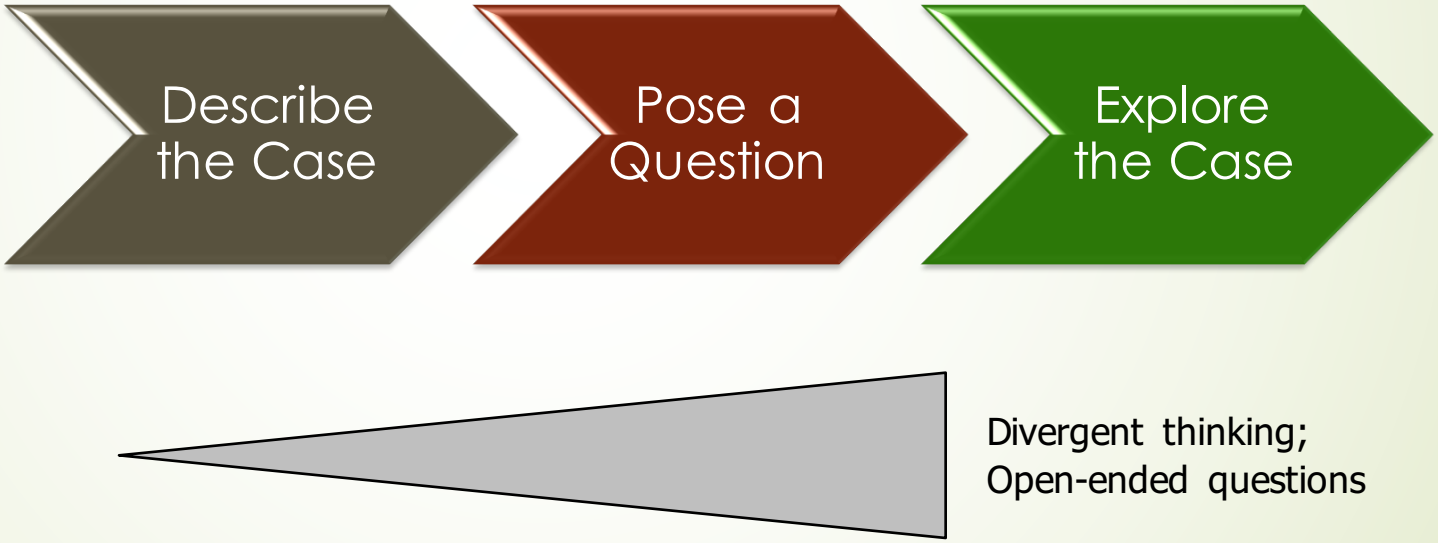
- Self-organizing
- Experiential education: The "curriculum walks through the door"
- Examples:
  - BlackBoard with students in Australia
  - Clinical Jazz
- Key is documentation

How do you begin to build trust in someone
who is so mistrustful of the medical
profession?

Minimal structure

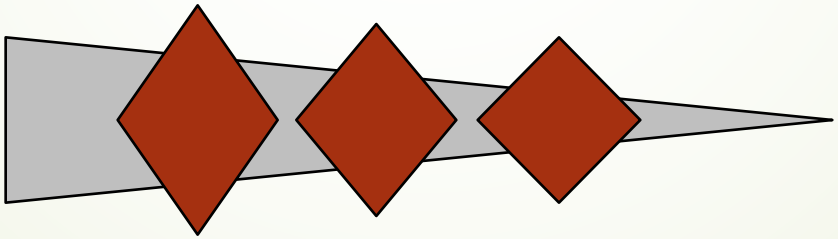
- Jotter draws a case in context and tells the story
- The group then explores the case and clarifies the question,
- reframes the question into a useful one,
- interacts around it, and in the end
- comes up with an actionable clinical pearl, specific to the jotter's question, and then, generalizable to practice

Opening

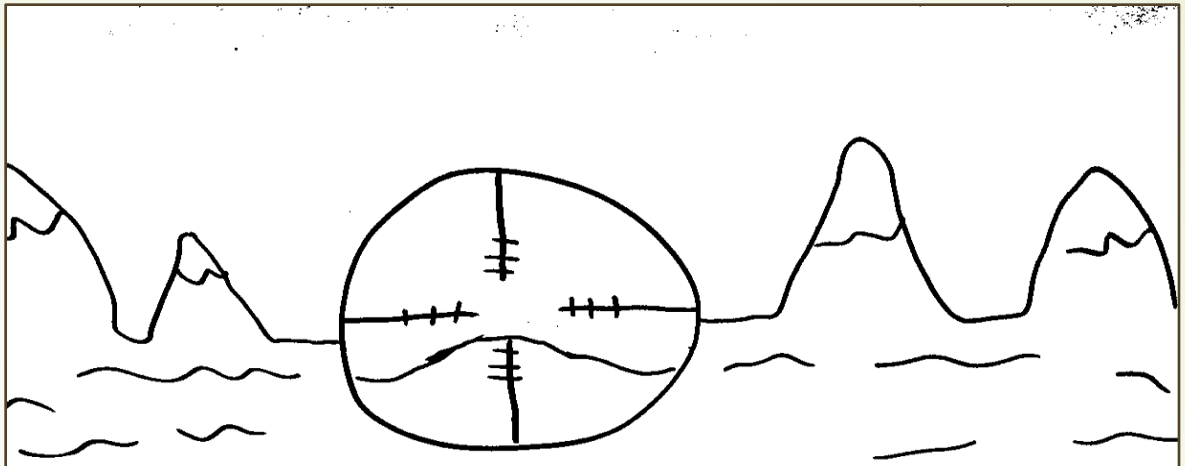

Describe the Case
Pose a Question
Explore the Case
Divergent thinking;
Open-ended questions

Closing

"The Action Turn"



Convergent thinking; "What if" and "How" questions; Solution statements

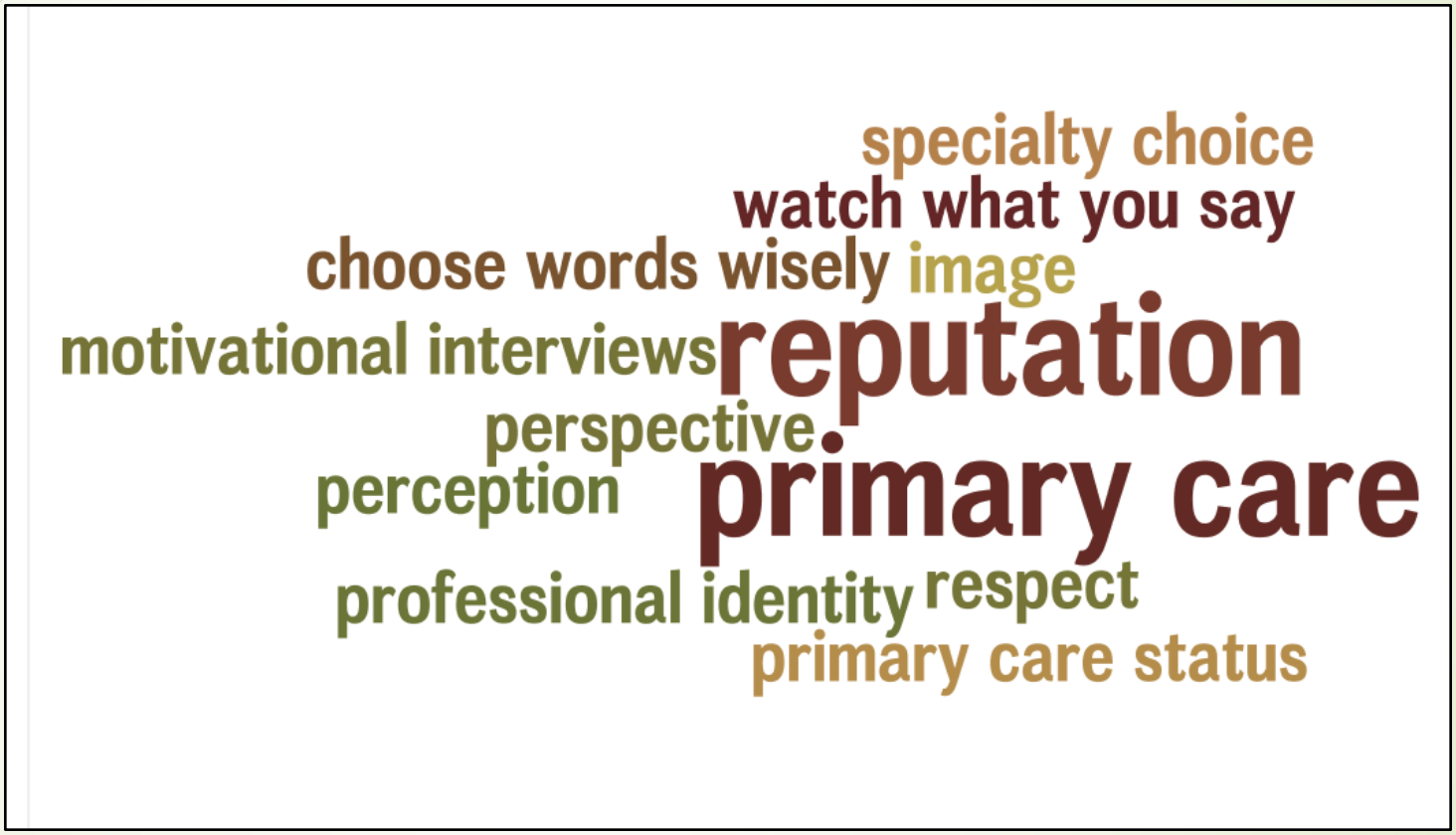


What is the realistic scope of practice for a Family Doc.?

How do I find the outer boundries of Family practice and realize my vision?

- You can do whatever you want, Just not everywhere
- Talk to people

Keywords


specialty choice
watch what you say
choose words wisely
image
motivational interviews
reputation
perspective
perception
primary care
professional identity
respect
primary care status

building trust
physician patient
underserved practice
perspective
system
personal beliefs
advocate
confidence
servant/facilitative leadership
limited experience
cynical
team facilitation
use resources
sensitivity
decide
take action
emotional expression
lawsuit
instruction
achieving
understanding
valuable opinions
learner expectations
do no harm
direct
hierarchy
empathy
deception
empowered
perception
conflict
do right thing
healthy behavior
principles
personality
law
duty
soft skills
beneficence
responsibility
beliefs
educating patients
humanism
remember
compromise
options
emotion
duty/right
good
priority
false hope
CCE
drawing
demand
family
relationship
common practice
negotiate
communication
health skills
respect
vs
dad
image
communicate
cost
control
behavior
selfish forces
know your patients
fire
sand
flirting
motivation
novice
news
usefulness
needs
ask
expectations
autonomy
anxiety
ethics
belief
FTE
patient
presence
asked
be a novice once in awhile
treatment of minor
forces
HIM
rural
documentation
experience others side
reputation
inspiration
convictions
values
patient centered
professionalism
outsource
change
balance
understand
work life
loss of control
date
motivational interviews
patients
CCE sheet
can
right
efficiency as a leader
taking responsibility
sympathy
informed consent
student
health
prognosis
house calls
patients best interest
endurance
profit in medicine
primary care
feelings
standard of care
relationships
doctor patient relationship
boundaries
osteopathic principles
primary care status
comfort
full disclosure
truth
achieve
positivity
medical knowledge
rights and duties
navigate
consciousness
limited medical knowledge
trust
business
inform
med student role
letting go of control
making a difference
role

Methods – Longitudinal Design

- Clinical Longitudinal Integrated Clerkship
  - Students meet curricular requirements longitudinally, rather than in separate blocks
  - Students are attached over time to a continuing preceptor, in the same place, either continuously, or intermittently
- Examples: Minnesota RPAP, Montana TRUST, "Mini-LIC," RTT's

Methods – Distance Education

- Weekly didactics
- Virtual Grand Rounds
- Telemedicine married to tele-education, ECHO Style (an expert on both ends of the connection), e.g. as proposed in Sulphur Springs, TX

Methods – Distance Education

"A unique aspect of the year two/three curriculum is the subspecialty education in neurology, endocrinology, pulmonology and psychiatry (NEPP).

Each block (4 weeks)...provides six full days of neurology, four days of endocrinology, two days of pulmonology and two full days of psychiatry. Residents have two NEPP blocks in year two and three blocks in year three."

Leslie M. Tingle MD, Developing RTT, Sulphur Springs, TX

Methods – Distance Education

"Each week, three of the seven specialty clinic half days are conducted in the telemedicine format and four are traditional live clinic consultations with the preceptors on-site. MSCSS physicians also provide after-hours telemedicine consultations for our hospital patients, including those in the ICU."

Leslie M. Tingle MD, Developing RTT, Sulphur Springs, TX

Summary

My intent in taking this approach is to develop and implement a plan that is:

- rooted in the fertile soil of rural practice and embedded in rural communities,
- deliberately designed to grow through the course of medical school and residency, and
- nurtured through "drip irrigation" and ongoing attention to the rural learning environment and the informal, as well as the formal, curriculum.

Discussion

References

- Longenecker R. "Curricular Design: A Place-Based Strategy for Rural Medical Education," in Bell E; Zimmitat C; Merritt J Eds. Rural Medical Education: Practical Strategies, New York: Nova Science, 2011.
- Strasser R; Worley P; Cristobal F; Marsh DC; Berry S; Strasser S; Ellaway R. "Putting Communities in the Driver's Seat: The Realities of Community-Engaged Medical Education," Academic Medicine 2015 Nov;90(11):1466-70.
- Community Engaged Residency Education for Rural Places (CERE-R)
  http://rttcollaborative.net/wp-content/uploads/2015/11/CERE-R-11-6-2015.pdf