The Four-Year Residency in Family Medicine: A Conversation With the Directors of the Nation's Most Fully Developed Programs

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Introductions

• Alan Douglass, M.D., Director
  – Middlesex Hospital, Middletown CT
• Dan Casey, M.D., Director
  – John Peter Smith Hospital, Fort Worth TX
• Roger Garvin, M.D., Director
  – Oregon Health Sciences University, Portland OR
• Wendy Barr, M.D., M.P.H., M.S.C.E., Director
  – Lawrence Family Health Center, Lawrence MA
Educational Objectives

• Recognize potential benefits of extended curricula and integration of individualized educational experiences into residency

• Identify potential challenges inherent in the transition to extended length of training.

• List speaker recommendations for maximizing success in curricular transition

Why 4 Years?
The Case for 4 Years

• More to teach
  – Residency structure substantially unchanged since 1969
  – Medicine and patients have become more complex

• Current curricular box is too small
  – Duty hours reduced available training time by over 20%
  – Current content no longer fits, and there is need for more

• A worthwhile investment
  – 4 year graduates are better prepared for practice

• It’s possible
  – Logistics are feasible

• Applicants want it
  – Demand is rising, particularly for curricular flexibility

Why 4 Years?

Changes in training:
• Decreased educational hours in residency
• Decreased clinical hours in medical school
• Desire for increased flexibility

Changes at work:
• Increased responsibility / PCMH
• Additional skills and knowledge needed for emerging healthcare system

36 Month Residency Education

Add 12 Months

Burned out new FPs
Decreased scope of practice

Make the Box Bigger

AMERICAN ACADEMY OF FAMILY PHYSICIANS
Timeline

- **1966**- Willard Report “3 or 4 Years”
- **2004**- Future of Family Medicine Project
- **2007**- Preparing Personal Physician for Practice (P4)
- **2007**- Middlesex Hospital implements first fully integrated 4 year residency curriculum
- **2011**- FM Working Party LoT Summit
- **2011**- ABFM Board vote
- **2013**- Length of Training Pilot begins

What is a 4 Year Residency?

- **Preserved current 3 year content**
- **Expanded core curriculum**
  - Pediatrics, practice management, etc.
- **Expanded focus on comprehensive, longitudinal care**
  - Patient-Centered Medical Home (PCMH)
- **Added Areas of Concentration (AOC)**

…all bundled into a **continuous, fully integrated** package
Conceptual Model

What a 4 Year Residency is **Not**...

- Creating subspecialists
- Residency followed by “bundled” fellowship (3+1)
- Optional “design-your-own bonus year”
- Remediation time for marginal residents
4 Year Residency Objectives

- Offer broader and deeper, high quality education that meets resident future practice needs
- Attract and retain high quality residents and faculty
- Prepare residents for practice in a PCMH
- Transform the continuity teaching practice into a PCMH
- Prepare residents to manage populations effectively
- Improve chronic disease management and prevention outcomes
- Graduate residents who are better prepared for and more satisfied with their subsequent practice

The Middlesex Experience

Alan Douglass, M.D.
Innovations

- Expanded both breadth and depth of training
- 6 additional core blocks
  - 3 pediatrics (Developmental, Sports, Peds ER)
  - 3 practice management, homecare, pop health, and QI
- 28 weeks of track time in 3rd and 4th year
- NCQA Level 3 PCMH at all continuity sites
- Continuity practice in all settings throughout all years of training with increased clinical encounters
Areas of Concentration

- Academics and Leadership
- Behavioral Medicine
- Geriatrics and Palliative Medicine
- Global and Community Health
- Hospitalist Medicine
- Integrative Medicine
- Maternal Child Health
- Personalized Track

All residents complete a capstone Project in their AOC

Current Outcomes

- 47 graduates of 4 year curriculum since 2009
- Markedly more clinical experiences
  - 2,800 continuity visits (1650 ACGME min)
  - 2,000 adult inpatient encounters (750 ACGME min)
  - 190 newborn encounters (40 ACGME min)
- All residents practice in NCQA Level 3 PCMH
- All utilize special skills acquired in their track in practice
- Marked rise in ABFM ITE and certification exam performance-from national mean to 1 SD above
- Dramatic rise in student interest and quality- interviews have tripled despite raising the quality bar- and much better Matches
- Strong market demand after graduation
Illustrative Outcomes

U.S. Senior Applications

ABFM ITE Program Mean

Successes

- Smooth educational and structural change
- Widespread engagement among faculty, residents, staff
- 88-92% resident satisfaction 6 years running
- 100% of residents view their training as strong
- Markedly more functional clinical practice
- Improved financial performance
- Substantial rise in resident scholarship
- Residency compliment expansion
  - 8-8-8 to 6-6-6-6 to 7-7-7-7 to (perhaps) 8-8-8-8
Challenges

- Change predictably brought out long-standing issues
- Flexibility is a slippery slope - requires balance with structure, transparency and equity
- Communicating identity and value of PCMH
- EHR reporting difficulties slowed QI initiatives
- Resident scheduling complex and at times contentious
- Balancing track and core educational commitments, including time away
- Faculty workload management

The JPS Experience

Dan Casey, M.D.
Innovations

Original P4 idea in 2006: Longitudinally infuse prior fellowship curriculum into four years of training.

Today: Longitudinal tracks, individual learner centered, generalist foundation, goal to meet community health care needs

2007 question:
Why were 50% of our graduates (2004/2005) entering fellowships?
• Why? A curriculum problem?
• Were we creating “FM subspecialists”?
• Where did all the generalists go?

Are community needs being met?
2017 answer

The Residents Wanted More.

And they are focused on meeting community needs…filling gaps they have witnessed

Willard Report 1966

• “...the program should be kept flexible in order that it might be tailored to the individual's background, future need, and level of progress...a satisfactory program will generally require 3-4 years after medical school, the exact time may vary with the organization, program and individual trainees particular needs.”

• JPS is the only program to set all these components in motion

• Our only modification--change from individual focus to add a communitarian approach
  – Social Justice implications of residency training
Our 2007 Transformation
Two Ideas…

• Offer four years of training—more experiences
  – Overcome “complexity” in medicine and in the world…more information in the past two years than in the history of mankind
  – Overcome work hour restriction related experiences?

• Spread added curriculum over four years — maintain a “generalist philosophy”
  – “Robust Generalism”
  – Overcome the “subspecialty mindset”

2017 Result

• Tracks, tracks, and more tracks
  – Maternal Child Health—near 40 graduates with over 90% doing operative OB
  – Advanced Rural Procedures
  – Street Medicine
  – Primary Care HIV
  – Psychiatry with focus on underserved
  – Acute care—EM and Hospital
  – Primary Care Oncology
  – Adolescent
Block Diagram

• Begin 1-2 months of PGY 4 curriculum in PGY 2 year
• Continue 2-4 months of PGY 4 curriculum in PGY 3 year
• Generalist family medicine rotations in PGY 4 (fail with sports!)

Maternal-Child Track (no CAQ)

<table>
<thead>
<tr>
<th></th>
<th>PGY 1</th>
<th>PGY 2</th>
<th>PGY 3</th>
<th>PGY 4</th>
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<tbody>
<tr>
<td>Prior Rural Extra OB</td>
<td>2 months</td>
<td>2 months</td>
<td>1 month</td>
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<td>Maternal Child Track</td>
<td>3 months</td>
<td>2-3 months</td>
<td>6 months</td>
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**Sports Medicine Track (CAQ)**

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<tr>
<td><strong>FM Rotations</strong></td>
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<td><strong>Sports Medicine</strong></td>
<td>2 months</td>
<td>4 months</td>
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<td>10-11 Months Elective available</td>
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**Outcomes - Recruitment Quadrupled**

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Outcomes - Academics

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<td>+59</td>
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The Mean Part 2 USMLE score of the residency is 240

Successes

- Recruiting, not just quantity
- “Engagement/Ownership” of education with the individualized approach
- Back to the rural and underserved areas with more skills…well, if not taken by residency programs!
- Distributive Justice within Medical Education
Challenges

• Fourth year funding
• Large program size helps with individualization but balancing requests always requires extra effort and an egalitarian approach

The Oregon Experience

Roger Garvin, M.D.
Innovations

• 6 months of Areas of Concentration
• Capstone Project
• Far more continuity clinic visits
• Robust PCMH implementation
• Longitudinal curriculum in:
  – Leadership, PCMH, information mastery, population health, behavioral medicine, geriatrics

Innovations

• Revised didactic format
• Increased use of simulation
• Increase team based learning
• Transitions of care curriculum – in all possible directions.
Patient First Scheduling

- 2+2 blocks – inpt and outpt
- Longitudinal learning cohorts
- Clinic based curriculum
- Increased availability to patients in all settings

Ambulatory Week

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<td>Sports</td>
<td>Longitudinal</td>
<td>FM Clinic</td>
<td>Sports</td>
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<td>curriculum</td>
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<td>PM</td>
<td>FM Clinic</td>
<td>Sports</td>
<td>Wednesday conference</td>
<td>FM Clinic</td>
<td>Sports</td>
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<td>EVE</td>
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## Clinic Week

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<td>Central Longitudinal curriculum</td>
<td>FM Clinic</td>
<td>FMC based Curriculum</td>
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<tr>
<td>PM</td>
<td>FM Clinic</td>
<td>FMC based Curriculum</td>
<td>Wednesday conference</td>
<td>FM Clinic</td>
<td>FMC based Curriculum</td>
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<td>EVE</td>
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## AOC Week PGY 4

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<tr>
<td>AM</td>
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<td>AOC</td>
<td>Longitudinal curriculum</td>
<td>FM Clinic</td>
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<tr>
<td>PM</td>
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<td>Wednesday conference</td>
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<tr>
<td>EVE</td>
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<td>FM Clinic</td>
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</table>
# Current Outcomes

- First 4 year class graduated 2016
- Diversifying AOCs with resident input
- Research section engagement in the capstone projects
- Improved comfort with beginning practice
Successes

• Excellent interest by applicants
• Excellent results in the Match
• Challenged and engaged faculty
• New partners are wanting to be sure they have access to these graduates

Capstone Projects

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
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<tbody>
<tr>
<td>Kamala Nyamathi</td>
<td>Transgender Health Curriculum</td>
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<td>Lindsay Braun</td>
<td>Adolescent Medicine Training in a Family Medicine Residency</td>
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<tr>
<td>Kristin Gilbert</td>
<td>The Effects of Psychosocial Adversity, Adult Attachment and Resilience on Health</td>
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<tr>
<td>Kira Paisley</td>
<td>Providing Preventive Healthcare to Women at Southwest Community Health Center</td>
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<td>Carl Rasmussen</td>
<td>Developing a Rural Area-of-Concentration</td>
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<td>Emily Waterman</td>
<td>Provider Assessment of Completed Surgical Abortions at Very Early Gestations</td>
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<td>Anthony Cheng</td>
<td>Feasibility of a Telemedicine Model for Inpatient Palliative Care Consults</td>
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<td>Jason Kroening-Roche</td>
<td>Behavioral Health Integration in Oregon Coordinated Care Organizations</td>
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<td>Jessica Johnson</td>
<td>Implementation of the Kaiser Neonatal Sepsis Calculator in a Family Medicine Residency Program</td>
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<tr>
<td>Rita Lahlou</td>
<td>Southwest Community Health Center Medical Student Curriculum Development</td>
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</table>
Challenges

• Lots of moving parts
• Constant assessment of effect of changes
• Funding
• Underestimated capstone needs
LFMR Mission

The mission of the Lawrence Family Medicine Residency is to create and nurture learning environments where physicians are inspired to develop expertise in family medicine and to dedicate themselves to the care of individuals, families and communities, especially those who are underserved.

Innovations

• Goal to provide full spectrum training for family physicians working in resource poor/underserved settings
### Outpatient Longitudinal Curriculum

<table>
<thead>
<tr>
<th>Curricular Area in Hours</th>
<th>R1</th>
<th>R2</th>
<th>R3</th>
<th>R4</th>
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<td>50</td>
<td>100</td>
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<td>Ortho/Sports Med</td>
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<td>100</td>
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<tr>
<td>Geriatrics</td>
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<td>Surgery</td>
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<tr>
<td>Outpatient Peds/Adolescent</td>
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<td>200</td>
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<td>Community Medicine</td>
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<td>Dermatology</td>
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<td>Addiction Medicine</td>
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<td>Integrative Medicine</td>
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<td>Subspecialty Care</td>
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</table>
Areas of Concentration

- Global Health
- Advanced Surgical Maternity Care
- Integrative Medicine
- HIV
- Academic/Faculty Development
- Health Systems Leadership
- Sports Medicine
- Women’s Health
- Addiction Medicine
- AOCs in Development
  - Behavioral Health
  - Hospitalist

Current Outcomes

- Improved Recruitment
  - 50% increase in US Grad applicants (trend of increased Step 2 scores)
- Class of 2016 – 4 graduates (chose to switch to LoT4 as R2s)
  - All using AOC skills in new positions
- Class of 2017 – 10 anticipated graduates
- Increase in resident scholarly activities
  - Presentations
  - QI projects → system changes
  - Community projects
- Financial viability of self-funding R4 year

2/20/2017
Successes

- Maintaining traditional scope of practice while expanding population health skills
- Global health and inpatient experience without sacrificing time at “home” in the PCMH
- Enhanced program wide community medicine engagement on multiple levels

Challenges

- Transitioning the curriculum
  - Schedules
  - Resident expectations
  - Change Management
- Balancing AOC specialization pressure versus generalist curriculum
- Meeting increased resident expectations (its 4 years – not 5)
- Faculty workload management – making a large number of curriculum changes over a 5 year period
Conclusions

• The 4 year residency is a valuable alternative to the traditional 3 year model

• Benefits identified include:
  – Improved resident satisfaction
  – Improved resident recruitment
  – Improved resident knowledge base
  – Improved quality of patient care
  – More clinical experience and better preparation for practice
Conclusions

- Curricular flexibility through AOCs is valuable to both individuals and programs, but must be balanced with transparency and clear expectations
- Focus on PCMH is particularly valuable
- Change and “building the airplane in the air” is challenging, but well worth the effort

Questions?

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Please...

Complete the session evaluation.

Thank you.