Primary Care for the 21st Century: Innovations in Care Models

WD09
Society of General Internal Medicine Annual Session - May 2, 2003

Jaan Sidorov, MD
James Walker, MD
Valerie Weber, MD
Geisinger Health System
Geisinger Health System

- Geisinger Clinic - 600 physicians in 79 specialties at 60 practice sites
- Geisinger Medical Center - Danville, PA
- Weis Children and Women’s Hospital
- Geisinger Health Plan
- Weis Center for Research
- Geisinger Wyoming Valley Medical Center
- 26 residency and fellowship programs, affiliation with Jefferson Medical School
Your faculty today

- Jaan Sidorov, MD - Medical Director of Care Coordination, Geisinger Health Plan, practicing general internist

- James Walker, MD - Chief Medical Information Officer, Geisinger Health System, practicing general internist

- Valerie Weber, MD - Director, Department of General Internal Medicine, Geisinger Medical Center, practicing general internist
Evolution of Medical Care

- Pre-20th Century: Symptom driven, Diagnosis made by history and physical examination. Limited treatment available
- No specialization, self-pay, housecalls
- Little record keeping, few regulations
Early to Mid-20th Century

- Differential diagnosis, Laboratory investigations
- Increased role of subspecialization, beginnings of higher tech treatment, indemnity insurance
- Traditional scheduling systems evolved
Mid-20th Century to end of 20th Century

- Preventive medicine - biochemical/image based screening of asymptomatic persons
- High tech, costly pharmaceuticals the norm
- Rise of managed care
- Rise of consumerism
- Internet
- Little change in traditional office practices
The result for doctors and patients alike
New Models of Care

- Increased self-directed care and the health care team
  - Patient access to clinicians & EMR, Disease Management
- Intolerance of Medical Errors
  - Error Prevention, Clinical Decision Support
- Information Systems
  - Immediacy of Information for patient/provider
- Patient/Consumer Driven office practices
  - Open Access, Group visits, patient education
What we will cover today….

- **Module I: Electronic Medical Record**,  
  – James Walker, MD

- **Module II: Open Access Scheduling/Group visits**,  
  – Valerie Weber, MD

- **Module III: Disease Management**,  
  – Jaan Sidorov, MD
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  – James M. Walker, MD

• Module II: Open Access Scheduling/Group visits
  – Valerie Weber, MD

• Module III: Disease Management
  – Jaan Sidorov, MD
Electronic Medical Record: The State of Our Art

1. InBasket
2. Schedule
3. Charting
4. Check Out
5. Chart completion
1. InBasket

- Administrative
- Results
  - Letters
- Patient Calls
  - Orders
  - Staff Messaging
- Co-Signs
- Cc: Charts
2. Schedule

- Patient List
- Snapshot
- Review
  - My latest note
  - Cardiology note
  - Latest TSH
  - Latest LDL
- Roomed
3. Charting

• Patient introduction
  – What brings you in? LBP and memory loss.
  – Have you had any more chest pressure?

• Check
  – Reason for visit
  – Vitals
  – Nursing notes
3. Charting

- Problem List
  - Enter LBP and memory loss.
  - Select existing problems to address.
  - Problem-oriented SOAP
    - General (CAD focused)
    - LBP neg.

- Health Maintenance check
  - Mammogram due.
The patient notes new low-back pain.
There is no personal history of cancer, trauma, or long-term steroid use.
 The patient has noted no fever, unexplained weight loss, urinary retention, saddle anesthesia, fecal incontinence, sciatica, or bone pain.

On exam, the lungs are clear to auscultation and percussion, the breasts are normal. There is no spinal tenderness to percussion. Both ipsilateral straight-leg raising and crossed straight-leg raising are negative. There is no ankle-dorsiflexion nor great-toe-extensor weakness.

Plan:
- Ibuprofen 400 mg PO TID
- Activity ad lib
- Return to Clinic 1 month
Uncomplicated LBP in 7 Clicks

{LBP REF:9365::"Early lumbar X-ray is not indicated when all of the above are negative. Order Set: LBP INITIAL. Deyo (1992) JAMA Validated by Performance Improvement and PR&CC, April 2003."}
3. Charting

- Orders
  - Mammogram due
  - TSH
  - LDL

- Rx Review
  - Change Lipitor to Zocor. (Type parts of three words, 13 clicks)
3. Charting

• Exam
  – General (CAD/CHF)
  – LBP (done)
  – MMSE
MMSE (in 14 clicks)

The patient answers
• Year correctly
• Season correctly
• Month correctly
• Day incorrectly (-1)
• Date incorrectly (-1)
• Names 3 objects all correctly
• Serial 7's: Counts to 65
• Spells 'world' backwards to DLRO (-1)
• Recall 3 named objects from earlier. 2 correctly (-1)
• Identifies 2 objects
Total score: 26-30 (normal)
3. Charting

- Orders
  - Dementia order set
- Re-cap with patient
- Print post-visit hand-outs
  - E & M code, RTC
  - Patient instructions
- Finish note
  - Assessment & Plan (hand-out)
Critical Challenges

• Adapting the software to (different) clinician thought-flows and workflows.
• Adapting clinician thought-flows and workflows to the software’s constraints.
• Both clinicians and software will be altered through the interaction.
• Both adaptations are the sort of puzzle that only some enjoy.
Critical Challenges

• Supporting both adaptations with education, audit, and feedback.
• All three are among the critical tasks on the healthcare agenda for the next decade.
• EMR/CDS has proven potential to improve clinical performance and efficiency.
• But this potential will only be realized to the extent that we complete these tasks.
Primary Care for the 21st Century and Beyond: Innovations in Care Models

Module 2 - Nuts and Bolts of Open Access and Group Visits

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Geisinger Medical Center
vdweber@geisinger.edu
General Internal Medicine
Department of General Internal Medicine

- 18 FTE faculty/14.8 clinical FTE
- 28,000 outpatient visits/year
- 4 inpatient medical services
- Medical consultation service
- Nursing Home/Home Health/Hospice
- Internal Medicine Residency Program
- Residency Ambulatory Care Clinic
What is advanced access (aka “open” access)?

• In a primary care setting, the ability to schedule an appointment with the patient’s regular provider at a time most favorable for them.

• Health consumers want convenience, and do not want to wait weeks and months to see their provider.

• Appointment times will be available the day the patient calls for an appointment, the next day or at an acceptable time in the future, preferably with that patient’s PCP.
Historical perspective

- Tradition of scheduling patients to fill provider’s schedules and squeeze in walk-ins or urgent care appointments when required is a relatively new invention.
- This provides “safety” in a fee-for-service system with limited competition.
- A full schedule is guaranteed, patients didn’t have much choice.
Open access requires an “attitude readjustment”

- Provider’s calendars do not need to be booked weeks in advance for providers to have full schedules.
- The measure of a “successful” provider is not having a completely full schedule months out, it is being available when your patient needs you.
- Providers can enter the day with a 40-50% calendar availability and complete the day with a full schedule
More truths...

- Provider calendars are currently full due to a gradual build-up of backlog or patient appointments over time, not insatiable demand.
- We need to strive to match patient demand with provider capacity, instead of using provider capacity or the scheduling template to shape demand.
Why open access? (continued)

- Patients are increasingly likely to change providers, and are more likely to choose providers based on convenience of service attributes rather than long-standing relationships.
- Referring physicians are more likely to send patients to subspecialists who give them and their patients superb service.
- Increase in patient satisfaction, patient loyalty.
- Increase in physician and staff satisfaction.
Benefits to the provider

- Improving access can improve quality of care because individual health can decline while waiting
- Poor provider-patient match leads to higher utilization of health care resources, higher ER utilization, etc
- Will have a more predictable schedule, less double-triple bookings, etc
- Reduces stress, decreased encounters with angry patients
Benefits to the practice

- More new patients, improved retention of patients
- Reduced no-show rate
- Less time spent scheduling and triaging patients
- Less rework of rescheduling patients
- Will be the preferred provider with health insurers due to increased patient satisfaction, fewer complaints.
Geisinger GIM - August 2000

- IdCOP team recently formed
- Baseline data gathered
- Third available appointment - greater than 90 days
- Future capacity - Less than 5%
- Cycle time - avg 58 minutes, avg appt time 23 minutes
- Backlog 2,112 patients
Measures: some definitions

- Third available appointment
- Future capacity: percent open slots for booking patients over the next four weeks
- Backlog: Number of patients who are past due for appointment with their provider
Reasons why we can’t change

We’ve never done it before
Nobody else has ever tried it before
We tried it before and it didn’t work
We’ve been doing it this way for years
It won’t work in a large organization
It won’t work in a small organization
It won’t work in our organization
Why change, things are okay
We need to think about it some more

Our organization is different
We don’t have enough time
Yeah, but ...
It can’t be done
You’re just rearranging the deck chairs on the titanic…
This is just about administration trying to get me to see more patients...
Our IdCOP team

- Co-leads: Physician lead and operations manager
- One other physician
- Front desk
- Secretarial
- Appointment scheduling
- Nursing
- PA
“It’s the access, stupid…..”

- Providers: stressful
- Squeezing in patients over lunch, end of the day, etc
- Patients: unhappy
- Poor provider-patient match: poor health care utilization? Poor patient satisfaction
GIM DLL 3RD AVAILABLE DATA

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Patient comments

• “There needs to be easier access to my provider for an appointment when needed earlier than scheduled appointment. My personal provider usually has no appointment slots open for weeks.”
Patient comments (Ouch!)

- “Your appointment process is deplorable. A central area for appointments with patients being sent whatever appointment suits you regardless of the patient’s schedule is unacceptable. People want to have control over when they have an appointment. You treat people as though it is a privilege for someone to be seen there and patients just wait... to be called or sent an appointment.”
Overcoming the fear (understanding demand)

- What is your panel size?
- Demand is not limitless, and can be quantified
- Track how many patients are calling on a daily basis for particular physicians
- Estimation: 0.8 % of panel will visit on any particular day
Converting to open access

• First physician enlisted
• Backlog reduction plan:
  – Count the backlog
  – Assess for “errors”
  – Prioritize the backlog
  – Plan for working it down: Extend hours, team with PA, changes in schedule, “max-packing,” other ways to increase capacity
  – Set a timeline, make it “public”
Conversion to open access

- Six weeks prior to conversion to open access, all patients asked to return within 6 weeks were given an appointment at checkout.
- All others completed a card.
- At the beginning of the open access period, the schedule was empty except for those returning within 6 weeks.
- Cards were sent out weekly (staggered).
Geisinger General Internal Medicine
100 N. Academy Ave.
Danville, PA 17822
570-271-7918

Month

☐ You are due for an appointment with your physician. Please call 271-7918 between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday for a return appointment at your earliest convenience. Then fill in the date and time and keep as a handy reminder.

Date _____________ Time ______________

☐ Your next appointment is scheduled for:

Date _____________ Time ______________
Doctor ____________________________

If you’re unable to keep this appointment, please call: 570-271-7918; 24 hours in advance.

#A-200-042-F Dev. 1/01js
Open access, continued

- When patients called in response to the card, they were offered an appointment that same day.
- If they did not desire an appointment “today,” they were scheduled an appointment traditionally.
- On a biweekly basis, monitored “number of cards” vs. “number of slots.”
Outcome measures - Third Available Appt (one provider)
Outcome measures - Future capacity
Backlog reduction data

Week 1: Balz 175, Gutknecht 189, Burke 463
Week 2: Balz 284, Gutknecht 77, Burke 0
Week 4: Balz 0, Gutknecht 90, Burke 463
Week 6: Balz 0, Gutknecht 0, Burke 249
Week 8: Balz 249, Gutknecht 0, Burke 0
Entire Practice - Future Capacity

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<tr>
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<th>Nov-01</th>
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<tr>
<td>Dickey</td>
<td></td>
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<tr>
<td>Knapper</td>
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</table>

DICKEY

K N A P P E R
Entire practice - third available appt

- Oct-01
- Nov-01
- Dec-01

[Bar chart showing appointment data for Dickey and Knapper in October, November, and December 2001]
Cycle Time/Appointment Length

- Cycle time
- Appointment length

Month: Nov-01, Dec-01, Jan-02, Feb-02, Mar-02, Apr-02, May-02, Jun-02, Jul-02, Aug-02, Sep-02

Time:
- 0:00
- 0:28
- 0:57
- 1:26
- 1:55
Maintaining open access

- Care teams
- Standardized appointment types
- "Huddles"
- Optimizing triage/phones
- Group visits
- Max-packing
- Analysis of return visit intervals
- Understand your demand
- Telephone management
- Email/Internet
What are group visits?

• A “new” model for the doctor’s office visit that increases patient and physician satisfaction, enhances physician-patient relationships, improves patient outcomes, and costs less than the traditional model of care
Multiple Models, Common Aim

- Care Delivery and Education
  - Chronic Disease Models (Diabetes)
  - Drop-In Group Medical Appointments (DIGMAs)
- Education Only
- Common Aim: to replace or supplement routine return appointments for patients with certain chronic diseases or extensive informational and psychosocial needs
Models Differ By:

- Patient characteristics and number of patients in group
- Length and frequency of visits
- Medical disciplines and types of staff who participate
- Types of group facilitation, provider and staff interactions, style
Patients:

- Additional support from “patients like me”
- More “face time” with doctor
- Get to know care team better
- Educational needs better met
- Can bring family members
- Address psychosocial issues
Providers

- Get off the “treadmill” of one-to-one visits
- Team approach
- Improve access: work smarter not harder
- Less repetition
Osteoporosis Group Visits

Aims

- Provide quality osteoporosis education in a group setting
- Increase women’s knowledge of osteoporosis
- Improved clinical outcomes/data collection
- Increase efficiencies
- Enhance revenue/productivity
Steps toward implementation

- Choose the model
- Select a champion/coordinator
- Obtain support
  - Administrative
  - Scheduling
  - Team members
- Secure patient involvement
- Data collection/feedback
The Model

Lay-oriented Slide presentation

Q&A overlapping with heel ultrasounds

Individual review of results, counseling

Warmup

5"

15"

15"

25"

Lay-oriented Slide presentation
Champion/Coordinator

- RN Team Leader
- Coordinates each session including enrolling patients, ensuring scheduling, gathering materials
- Data collection
Obtaining support

- Department of Medicine and Organizational Administration
- Rheumatology Division - Slide presentation and use of heel ultrasound machine
- Scheduling/Administrative Ass’t support
- Education room transformed from unused conference room
- Team members: Champion (RN), additional RN, and Physician lead
Securing patient involvement

- Practice data base searched for female patients over 45 years of age
- Were sent letters inviting them to participate in the group
- Physicians could also refer
Data Collection

- Collect data on risk factors, presence of preventive behaviors/medications
- Heel ultrasound results, and tracking of patients who go on to DEXA scanning
- Patient evaluations
- Physician feedback
Outcomes

• 31 patients over 45 groups
• Mean age, 60.6, mean age at menopause 45.9
• Risk fx: 29% family hx of fractures, 29% hx of adult fractures, 3% smokers, 6% weight less than 127 pounds, 3% chronic steroid use
• Daily calcium >1200 mg, only 58%, current use of HRT 64%
Revenue and Reimbursement

- Established level 2 visits, dx: menopause
- 0.45 RVUs, $55
- Heel ultrasound, $60 per patient
- For a group of 8 patients, equals $880 for one hour of clinical activity
- Cost of heel ultrasound = $11,000
Documentation

- Templated note “built in” to EMR
- Patient’s PCP “cc’ed” electronically when note completed
Module 3: Coordinating Care

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Where we need to go….

“Moving into the next century, the most important breakthroughs will be in the form of clinical process innovation rather than clinical product improvement…the next big advances in health care will be the development of protocols for delivering patient care across health care settings over time.”

John Kleinke, *Bleeding Edge*
Things to Think About....

- Nature of Health Care: What is the role of physicians?
- Patients vs. Populations
- The Money
Care Coordination

A Department in Geisinger Health Plan devoted to the achievement of improved outcomes for member populations characterized by the presence of a chronic condition such as:

- Diabetes
- Asthma
- CHF
- COPD
- Hypertension
- Tobacco
- Depression
Case Management

Comprehensive system for overseeing the entire episode of illness requiring the systematic organization of interdisciplinary services, education, empowerment and resources that provides the right medical, physical, emotional and spiritual care and advocacy at the right time.

- Local “Change Agents”
- HMO Employees
- Currently 52 nurses, 60 sites
The Nature of Health Care

What is the role of physicians?
and
Patients or populations?
Health Care

“physician led”
“doctor-patient relationship”
“physician driven”
“buy-in”

Physician

Patient

It’s Magic!
Outcomes are the summation of numerous individual encounters.....?
“The Old Health Care System”
....and it doesn’t work very well.....
Page Is Much Bigger!
Sommers et al: Physician, Nurse and Social Worker Collaboration in Primary Care for Chronically Ill Seniors.
543 Patients in 18 Office Practices, All Measures <.05

Arch Int Med. 2000;160:1825-1833
What’s the ‘Best Model’ of Care for Chronic Illness?

Combined Physician and Case Management (and patient)
Managed Care

Your HMO says I, the physician, now have the final say...

Tell me, doctor, how long have you had these delusions?
Managed Care

Primary care capitation provides “130%” for “Coordination and Case Management”
The New Health Care System

Population

- Information Systems
- Triage
- Records
- Office
- Money
- Nurses
- Case Management
- Physicians
- Demand Management
Patient “versus” Population

**Patient**
- Provider’s perspective
- Clinic/location based
- Case reports/anecdotes
- Fee for service
- Revenue/costs

**Population**
- Everyone else’s perspective
- Independent of location
- Outcomes
- Pre-paid/managed care
- Insurance Risk/Savings
The money?
How Does The Money Work?

- Reduce total health care utilization and
- Reduce variation of utilization through
- Achievement of targeted outcomes in
- populations with a disease that are in a
- capitated payment system
How Does the Money Work?

**Usual Care**
- FFS: level of care
- Revenue > Costs
- Process
- Transactional

**Disease Management**
- Capitation
- Savings
- Outcomes
- Transformational

Who wins financially if cost is avoided?
How Does the Money Work?

• Winners reduce cost….. not increase revenue
• If Utilization goes down, will YOU benefit?
Care Coordination vs. Usual Care
Comparison among GHP members fulfilling HEDIS® criteria for diabetes mellitus, ’99 & ’00 (p<.05 all comparisons)

Care Coordination Diabetes Mellitus

Per Member Per Month
$\Delta = $104.86

Implementation
Your Turn!