The National Medical Home Summit

March 2 and 3, 2009
• Allan D. Currie, MD, FACP
• Chief of the Medical Service
• Practitioner Internal Medicine
• Eastern Maine Medical Center
• Bangor, Maine
Technology-based Patient Registries and Managing Population-based Preventive Care: The Foundation of the Patient Centered Medical Home
Electronic Medical Records

• Sponsorship of the EMR starts at the top with an administration that is committed to a completely electronic patient record and technology based quality improvement
Eastern Maine Medical Center

• The only winner of the 2008 national Nicholas Davies Award for effectively using information technology to improve the safety and quality of patient care
Primary Care Practices

- 6 practices
- 32 physicians
- 19 physician extenders
- 26 family medicine residents
- All providers certified by NCQA
- All offices certified as Patient Centered Medical Homes
Early EMR

- Internal Medicine began to use the EMR in 1995
- Much of the data from other offices was collected from paper charts
- Data was blinded in the beginning
Crude Beginnings in 1995

1995 - 1997 Pap Smear Summary
No EC

*Data for 1997 includes only 4 months.
Patient Registries

• As offices came on line with the EMR we began to compare data from office to office
Data Gathering 2004-05

Pap Smear Done in Prior 3 years, age 21-65, Seen in Prior 12 Months

Adherence to Standard

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EMMC Office
Preventive Care Screening 2004-2005

COLON CANCER SCREENING IN PATIENTS OVER AGE 49 SEEN IN PRIOR 12 MONTHS

Adherence to Standard

EMMC Office

12/16/2004
4/15/2005
7/28/2005

15% 25% 45% 65%
Preventive Care Screening 2004 - 2005

Mammography Done in Prior 24 Months, Age 50-69

Adherence to Standard

EMMC Office

5%
55%

Brewer
Evergreen Woods
FP Center
Husson IM
Orono

4/26/2004
8/26/2004
12/16/2004
4/15/2005
7/28/2005
Diabetes Measurement
Internal Medicine Office

HIMS July 2005 compared to July 2006

HgbA1c Total Drawn
HgbA1c<7.0
HgbA1c>9.0

5-Jul 6-Jul

[Bar chart showing HgbA1c levels and comparison between July 2005 and July 2006]
Diabetes Measurement
Internal Medicine Office

HIMS July 2005 compared to July 2006

BP<131s/<81d
LDL Drawn
LDL or Calc LDL<100
Total ASA

5-Jul 6-Jul
Quality Improvement Initiatives

• In 2006 we hired an RN in the internal medicine office to help monitor and improve quality

• We protected her time. There is always pressure to use her elsewhere in the office
Internal Medicine Physician Specific Data

• By 2007 we began to look at providers at our internal medicine office in an unblinded fashion

• We began monthly quality meetings in our office
Other Topics

- Diabetes
- CVD
- COPD
- Chronic Pain Management
- CHF Project
- Centricity Updates
  - Medication Custom List
  - Tips and Tricks

UPDATE
Preventive Care Screening
Unblinded 2007-08

Colon Cancer Screening QI: Active Patients Age 50 and Older
Sept '07 - Sept '08

- % Colon Cancer Screening
- % Colonoscopy Screening
- % Hemoccult screening
Problem List Accuracy

Percent Active Patients with BMI documented and Percent with BMI > 30 and Diagnosis of Obesity
Sept '07 - Sept '08

- Ronco
- I. Sababagh
- Stepanek
- Currie
- Kingsbury
- Swan
- Bragg
- Husson IM

- Between 18-80 w/BMI measured
- 18-80 w/BMI > 30 and Dx of obesity
Trying New Approaches to Care 2006

- Diabetes Group Visits. Patients met together with provider, RN and MA for 1.5 hours every 3 months

- Concluded that patients loved group visits, providers enjoyed them, but we did not see benefit in results
Diabetic Group Visits 2006

HGBA1c March 2006 thru June 2007

HgbA1c
Diabetic Group Visits 2006

HgbA1c Group Visit V. Control Group

Group Visit  Control Group

Eastern Maine Medical Center
Inspiring confidence in care
Quality Projects 2008 -09

• We have looked at our data in
  – Diabetes
  – Vascular disease
  – COPD
  – Opiate Use
  – Depression
  – Osteoporosis
Reconciliation of Orders

• Labs and X rays: we monitor every order and send reminder letters 3 times

• Referrals are monitored for completion

• Meds: we reconcile the medication list after every visit with copy to the patient and after every hospital discharge or transfer
Care Management

• In 2008 we began to have our RN help manage patients with an A1C over 9
• Phone calls made every 1-2 weeks to review glucose log
• Medication changes by provider and communicated to the patient by RN
DM Performance Improvement 2008

HIMS DM By Provider: HGBA1c less than 7.0

Bragg, Currie, Kingsbury, Ronco, Sabbagh, Stepanek, Swan, Al-Atrash

DM Performance Improvement 2008

HIMS DM By Provider: HGBA1c greater than 9.0
DM Performance Improvement 2008

HIMS DM By Provider: Blood Pressure less than 130/80

- Bragg
- Currie
- Kingsbury
- Roncol
- Sabbagh
- Stepan
- Swan
- Al-Atrash

IVD Performance 2008

HIMS IVD: LDL less than 100, B/P less than 140/90, Anti-Thrombolytic Therapy

- LDL or Calc LDL less than 100: 64%
- Blood Pressure less than 140/90: 77%
- Anti-thrombolytic (Does not include Alerts or refused): 97%

Dates:
- 1/23/2008
- 4/14/2008
- 7/15/2008
- 10/10/2008
- 12/10/2008
- 1/14/2008
IVD Performance 2008

HIMS IVD: Smoking Advice, BMI, Depression Screen

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<th>Smoking Advice</th>
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IVD Performance 2008

HIMS DM By Provider: LDL less than 100

Bragg | Currie | Kingsbury | Ronco | Sabbagh | Stepanek | Swan | Al-Atrash

IVD Performance 2008

HIMS IVD By Provider: B/P less than 140/90 (Goal 75%)

- Bragg
- Currie
- Kingsbury
- Ronco
- Sabbagh
- Stepanek
- Swan
- Al-Atrash

Dates:
- 1/23/2008
- 7/15/2008
- 3/17/2008
- 9/15/2008
- 5/17/2008
- 10/10/2008
IVD Performance 2008

HIMS IVD By Provider: Anticoagulation Therapy (Does not include alerts or declines)

- Bragg
- Currie
- Kingsbury
- Ronco
- Sabbagh
- Stepanek
- Swan
- Al-Atrash

Dates:
- 1/23/2008
- 3/17/2008
- 5/17/2008
- 7/15/2008
- 9/15/2008
- 10/10/2008
COPD Performance 2008

HIMS COPD Data: FEVI, Flu shot, Pneumovax

FEV1 /Spirometry (Not Blank)

FLU Shot (Data 10/13/2008 on or after 09/15/08)

Pneumovax (Not Blank)

- 1/24/08
- 2/28/08
- 3/17/08
- 4/17/08
- 5/22/08
- 6/18/08
- 7/16/08
- 8/27/08
- 9/17/08
- 10/13/08
Opiate Monitoring 2008

HIMS-MC: Medication contact & Drug screen in the last 12 months

- 79.1% on 6/23/2008
- 60.2% on 1/14/2009

HIMS-MC with Med Contract
HIMS-MC with Drug Screen in the last 12 months
Latest Data on DM

• Our practice has 1000 diabetics

• 66.8 % have A1C under 7
• 6.3 % have A1C over 9
• 68 % have LDL under 100
• 56 % have BP under 130/80
DM Performance 08-09

HIMS DM HgbA1c Drawn, Less than 7.0, Greater than 9.0 (Goal: 40% and 15% respectively)

- HgbA1c Total Drawn: 94.7%
- HgbA1c less than 7.0: 65.8%
- HgbA1c greater than 9.0: 6.0%

Dates:
- 1/30/08
- 4/14/08
- 7/15/08
- 10/10/08
- 1/14/09
DM Performance 2009

HIMS DM By Provider: HGBA1c greater than 9.0

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DM Seasonal Variation

A1c Less than 7.0

Trends: December and March Each Year

A1c Less than 7.0
DM Seasonal Variation

A1c greater than 9.0 Trends December and March Each Year

A1c greater than 9.0
Care Manager Hired
January 2009

• Helping providers manage
  – CHF
  – Asthma
  – COPD
Costs and Reimbursements

• We find that multiple costs are not covered by pay for performance but it is getting closer

• The data certainly points to improved care
Future

- Secure E Mail that links with Centricity. Pilot project under way
- Psychiatric nurse practitioner
- Linkages with all providers
- Linkages with all systems
Sunset at the North Pole