Application of Medical Claims Data in the CME Environment

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Agenda

- The RAPID Initiative
- What is Medical Claims Data Base and How Can It Be Used in CME?
- Medical Claims data and the RAPID Initiative – a work in progress
- Preliminary results
- Limitations, conclusions and lessons learned

The RAPID Initiative

- Multi-tactic
- Multi-supported
- Multi-year (2007-present)

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Medical Claims Data Sources

- CMS-1500 Medical Claims (history from September 1999)
  - Completed for patients seen in clinician offices. More than one billion claims per year submitted by over 870,000 clinicians
- NCPDP Prescription Claims (history from April 2001)
  - Submitted for patients receiving a prescription via retail pharmacy; the NCPDP prescription claims represent dispensed prescriptions for approximately 55% of all pharmacies
- Data includes claims across all third-party payer types, including commercial, Medicare, Medicaid, and Blue Cross/Blue Shield
- This data is available in near real-time and is the largest aggregate database that's currently available.

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Medical Claims Database can provide

- Objective data for use in PI CME Stages A & C
  - Not reliant on learner uploads at Stage C
- Control groups of like physicians for comparison purposes

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Retrospective Pilot Study 2008

Based on CME initiative goals of PCP making provisional diagnosis of RA and early referral* to rheumatologists, we wanted to determine the feasibility of using database to

- Identify test group from RAPID participants N=531
- Identify matched control group from non-participants who were in database
- Referral was inferred by identifying "shared patients" one patient + PCP using IDC9 code for RA + Rheumatologist +RH using IDC9 code for RA

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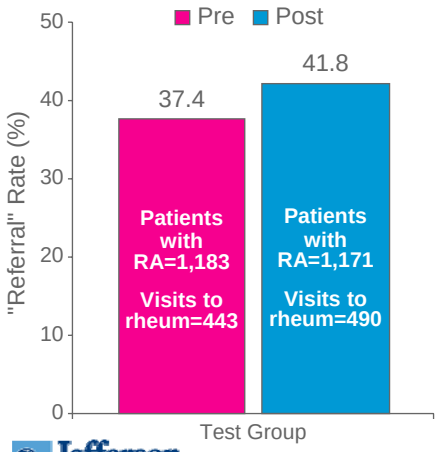
2008 Pilot Study :
Test Group "Referral" Rates
4 Mo. Pre vs. 4 Mo. Post CME Activity Date



11.8% increase in "referral" rate among participants

- Participant Difference= +4.4%
- No difference in control group

Matched data from 531 RAPID 2007 CME activity physician participants.

Pilot Study Conclusions

- **It was feasible to use medical claims data to measure outcomes of participants v non participants at the level of participant performance**
- **Further uses could be explored:**
  - **For performance gap analysis (needs assessment)**
  - **To identify physicians with the greatest need for performance improvement (target audience)**

Which PCPs are not referring to rheumatologists at anticipated rates?

  - **Those identified became the target audience for RAPID CME activities and outcomes measurements**
  - **For more rigorous educational outcomes measurement**

2009: Database Use for Selection of Target Learners (n=97,000)

- Primary care provider with
  - ≥ 8/14 mos. of claims data per clinician
  - High concentration of female patients between ages 25-55 and males 50-55
  - Fewest number of RA diagnoses (<15) amongst 451,000 clinicians
  - Fewest number of patients being co-managed by a specialist
- Potential Patients under their care
  - 11,583,309 (F/25-55; M/50-55), estimate 1% = 115,833 potential RA impact
  - 115,833 potential RA patients (conservative)

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Individuals Identified in 2009 Received Multiple RAPID Activities

- Direct mail
  - CME newsletter series
  - Pocket educator
- Recruitment for multiple events
  - Live CME symposia
  - Hands on Diagnosis Skills Workshops
  - Online CME activities

Planned measurement of participants' application of recommended clinical strategies using database

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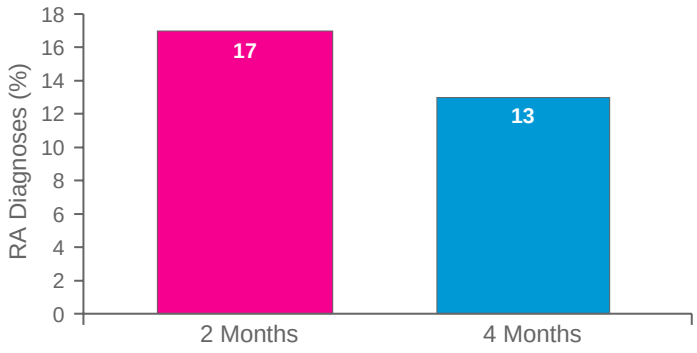
Outcomes 2009: Preliminary Diagnostic Trends for Targeted General Practitioners (n=322)* 2 Mos. Vs. 4 Mos.



In addition: 6% Increase in Shared Patients 4 months post activity

*GP, FP, DO, NP, PA
Data analysis still underway

2010 Current Application of Data Base

Learner Selection Data Base now includes 870,000 Clinicians

- **Selection Criteria updated to include**
  - **Fewer than 7 RA Dx over last 14 mos.**
- **61,382 Clinicians identified**
  - **General practitioners: 48,643 / Internal medicine: 12,739**
- **Patients under their care**
  - **17,748,309 (F/25-55; M/50-55)**
  - **1% = 177,483 potential RA impact**
  - **177,483 potential RA patients (conservative)**

Planned Analyses for RAPID IV

- RA diagnostic trends amongst identified learners
- Shared patient trends beyond 4 months
- Trends amongst single intervention vs. multiple intervention learners
- Comparison of trends for sub-sets of learners
- Control groups for all learner populations
- Evaluation of activities for effectiveness

More robust analysis

in progress of 2009 data / designed for Rapid IV

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Limitations

- No self-assessment stage for PI CME
- Inability to
  - Communicate performance increases/decreases back to the learners (privacy laws)
  - Fully analyze the variances between the way different specialists perform after participation in similar CME activities
  - Follow potential shared patients beyond 4 months

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Lessons Learned

- Feasible to use medical claims data to
  - reveal performance gaps and target learners
  - Examine impact of initiative on practitioners and patients
- Participation in a CME activity can have a positive impact on generalist's diagnosis skills
- Participation in a CME activity can have a positive impact on generalist's interactions with specialists
- Learning erosion from CME activities begins at approximately 8-12 weeks post-intervention

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RAPID Collaborators/Funders

- Year 1 – 3
  - The Chatham Institute, ACP, AAPA, AANP, Harvard, Primary Care Education Network (PCEN), Pri-Med, AFPPA, GAPA, MAPA, Improve CME, Vigilytics*
  - Commercial Supporters: Abbott, Amgen/Wyeth, Bristol-Myers Squibb, Centocor, Genentech
  - Distribution Partners: Medscape, Pri-Med, PCEN, Epocrates, Online CME at Harvard, Journal of Family Practice, AFPPA, GAPA, MAPA, Vigilytics
- Year 4
  - Jefferson Medical College, Curatio CME Institute+, Improve CME, Vigilytics
  - Distribution Partners: Pri-Med, Epocrates/Real CME, Vigilytics
  - Commercial Supporters: Abbott, Centocor, Pfizer

*not involved in Year 1

+ Educational Designer and Medical Director consistent from TCI to Curatio

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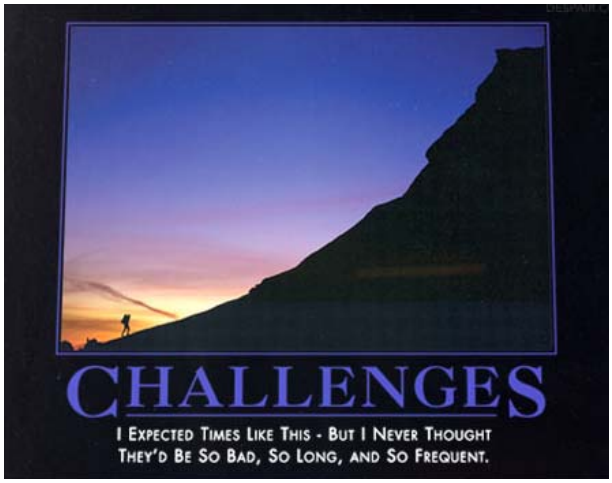
The Road Ahead…



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