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.
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

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

Patients with RA=1,183
Visits to rheum=443

Patients with RA=1,171
Visits to rheum=490

11.8% increase in “referral” rate among participants
- Participant Difference = +4.4%
- No difference in control group

Pilot Study Conclusions
- It was feasible to use medical claims data to measure outcomes of participants vs 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)

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

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

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

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

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
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

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

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
The Road Ahead…

CHALLENGES
I EXPECTED TIMES LIKE THIS - BUT I NEVER THOUGHT THEY'D BE SO BAD, SO LONG, AND SO FREQUENT.