# Evidence to Date - Clinical Practice Transformation

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# Early Concepts of Quality Health Care

- 1972 – Prof. Archie Cochrane published a major work *"Effectiveness and Efficiency: Random Reflections on Health Services".*

- 1987 – UKPDS (united kingdom prospective diabetes study) – a randomized 20year study, ran till 1997, gave the first unified data that enumerated complications in DM

# Seminal Events in Diabetes Practice Transformation

- Relationship of A1c to Risk of Complications led to defined Quality Metric of Target A1c 6.5-7%
- 1987 Introduction of Biguanide (metformin) and Thiazolidinediones (triglitazone, rosiglitazone, & pioglitazone) to augment T2DM Treatment to Goal
- EBM concepts, collated from randomized clinical studies before 1993, are published as Practice Guidelines by specialty guilds, included ADA
- Evolution of Quality Care with P4P under the leadership of BTE

# Why, Who & When to Treat High Blood Sugar?

- Oslerian (Sir Wm. Osler, 1849-1919) Paradigm is recast in a modern paraphrase – “If you know diabetes, you know medicine”
- Complications of Diabetes affect the major organ systems – Brain. Eyes. Heart. Kidneys. Limbs. Gut. Genitals. Nerves. Infections. Etc.
- Chronic illness, poor QOL, and premature death due DM result in excessive healthcare spending

# Practice in West Louisville

- Started in 1987: ethnically approx. 45/55
- Within old downtown neighborhood
- High BMI, DM, HTN, alcohol, tobacco, etc
- Accept all major insurers in the region
- Univ. Ky & Univ. Louisville students rotate
- No infrastructure for EMR
- Quarterly 1,000-1,200 encounters for DM

# Before BTE – Quality Perception

- Diabetes is a tough chronic illness to manage. Despite practice difficulties, I perceived that my overall performance and standard of care (SOC) rating was High. How did I or other physicians measure “high quality care” given to patients?
- Effectiveness (EBM learned from medical school/residency training) and Efficiency (costs and service utilizations) based on individual patient and not on cachet population
- My perception was that my score on the metrics of treatment to goal (TTG) would eclipse 100% in a peer review forum, based on the above conjecture and availability to my patients

# After BTE – True QOL Metrics

- Perceived self measurement (PSM) of a 100% score on SOC, that I delivered, compared to the real performance measurement (RPM) grading, using the parameters of the BTE metrics, scored me at 40-80% range
- BTE survey exposed lag in Retinal exams, inadequate MAU screenings, and Glycemic controls hindered by delayed use of some pharmaceutical combinations
- BTE stimulated the re-tooling and reviewing of System Translation of my practice: set practice standard; review ADA and other relevant guidelines; set up default-to-action intervention; and periodic internal auditing

# After BTE - Big Challenge: Reaching Metrics Goal without EMR

- Prioritize the flow chart of the ADA metrics on a redesigned office visit progress note
- To avoid future glitches, I discussed protocols of consults with them: their offices report “no show” and contact the patients plus a second call from my office
- Patients bring in all their medicines during every office visits to verify needs and uses
- Vital signs and BMI’s at every visit; patient re-education after visit exams; S.O.A.P. format is used for documentation – data shared with the patients (surrogate report card)

# Recruiting & Educating “Gatekeepers” or “First Responders” in Healthcare

- New BTE applicants should know that participation could be started without expensive EMR investment
- PCP’s are the default gatekeepers or first responders to patients entering the health system and they must be aware of the SOC parameters to guide their patients through the system
- PCP’s should know the common good benefits of early diagnosis and early start of treatment of new patients: Cochrane’s Effectiveness (the Doctor/EBM/knowledge) and Efficiency (the Physician/cost/utilization) to prevent protracted complications
- Medicine: the Art with applied Science and Technology

# Summary – System Translation

- BTE participation has helped my practice focus on SOC for continuous Quality Care
- Because of the focus, the practice adopted a transparent progress note in lieu of EMR
- Challenges from lag data collection and therapeutic measures were systematized
- Periodic reviews of guidelines, practice standards, and performance measures are fundamental to perpetual “excellence”