SESSION 2

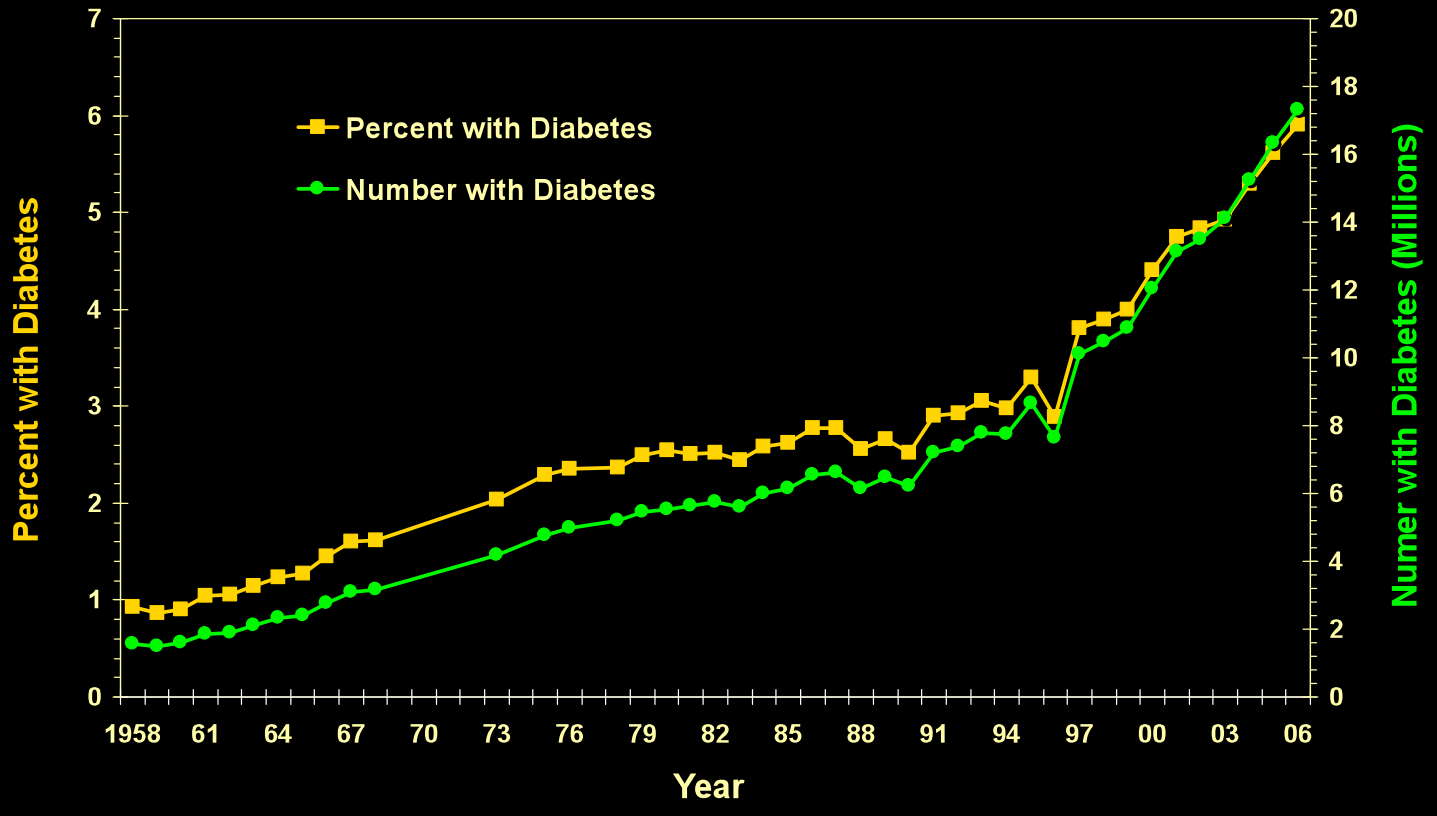
Translation: Implications for Clinical Practice

OVERVIEW

Irl B. Hirsch, M.D.

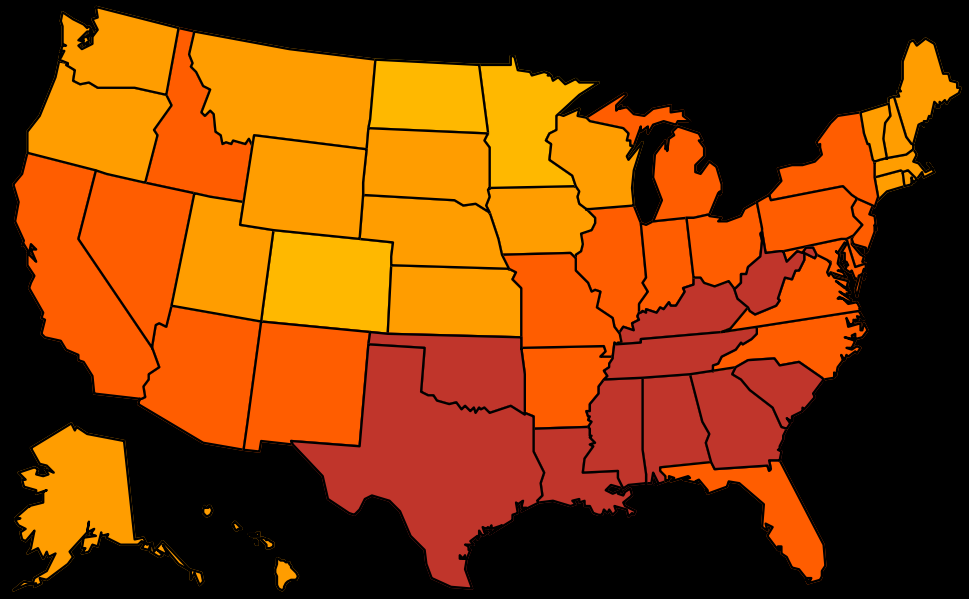
University of Washington, Seattle, WA

Putting the Problem Into Perspective



CDC's Division of Diabetes Translation. National Diabetes Surveillance System available at http://www.cdc.gov/diabetes/statistics Accessed 12/22/08

Age-adjusted Percentage of U.S. Adults Who Had Diagnosed Diabetes: 2007



Missing data
<4.5%
4.5 - 5.9%
6.0 - 7.4%
7.5 - 8.9%
≥9.0%

CDC's Division of Diabetes Translation. National Diabetes Surveillance System available at http://www.cdc.gov/diabetes/statistics

But Wait a Minute! Look at What Has Happened To Diabetes Care in the Past 15 Years!

- Introduction of metformin, TZDs, AGIs in the 1990's
- Introduction of insulin analogues in the 1990s and 2000's
- Introduction of pramlintide and incretins this decade
- Introduction of improved SMBG devices and CGM this decade

And how has this impacted the information available to PCPs to manage T2DM?

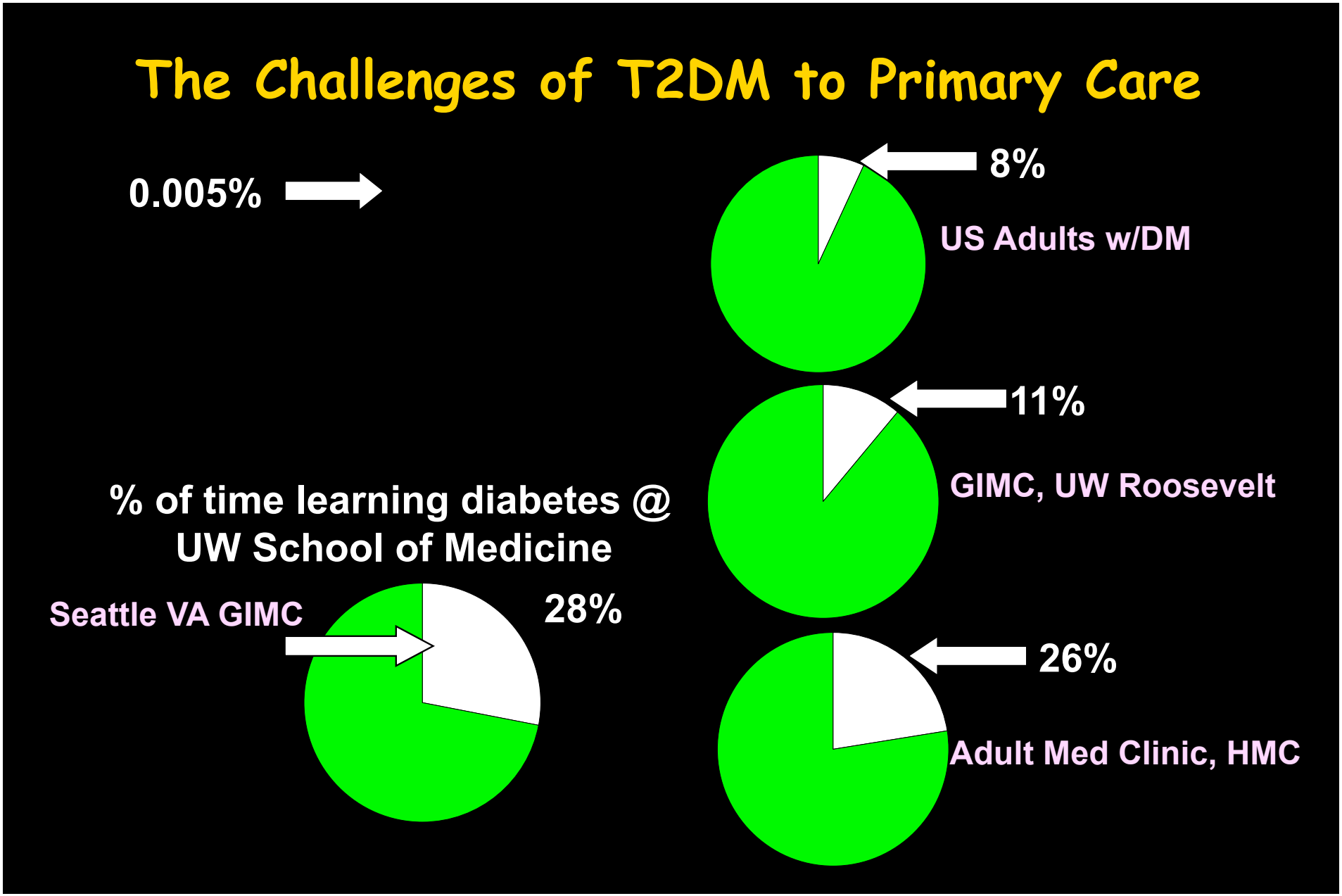
The Challenges of T2DM to Primary Care

- 321,000 citations in pubmed the past 5 years
- 112 citations in the WSJ the past 3 months!
- Explosion of new understanding of clinical and basic science in all aspects of diabetes
- How can the primary care physician keep up with what's best for his/her patient?

Issues to Consider

- Is the system infrastructure appropriate to PCPs to be successful in reaching treatment targets for their patients with type 2 DM?
- Do we train our primary care residents appropriately?
- Do PCPs and all clinicians have the appropriate tools to assist their patients to reach their treatment targets?
- What data exist to address these issues?

The Challenges of T2DM to Primary Care



Medical Student Teaching: UW

- Minimal time teaching clinical diabetes
- Diabetes Care Center: ~20/210 rotate through 3rd and 4th years
- Most diabetes seen in in-patient setting and primary care clinics where often diabetes expertise is inconsistent

IM and FP Residency Programs

- More emphasis on out-patient management
- Often in setting of populations many physicians will have little contact after training
- Often little expertise for state-of-the-art diabetes management by supervising physicians

What About DM Care AFTER Residency?

- Unrealistic to have all elements of a diabetes team due to cost
- System is based on seeing as many patients as possible
- Biggest problem: time spent with the patient

How Much Time Do We Spend With Patients?

- One report assessing family physicians noted doctors spent 20 minutes *per year* with each patient addressing T2DM (Ann Fam Med 2005;3:209.
  - The same report noted only 10 min/year for osteoporosis, COPD, and CAD

How Do We Do Managing Glycemia?

- NHANES, BFRSS data reported by CDC (Ann Intern Med 2006;144:465)
- N = 13,828 (1999-2002)
- 36.5% > 8% A1C
- 21.1% > 9% A1C

Our Goal For Today

- Look at the science for the treatment of T2DM with particular emphasis on the β-cell
- Review the implications of the therapies for T2DM as it pertains to modern-day practices of both PCPs and endocrinologists
- Review new therapies as it relates the the β-cell and implications for a rational treatment algorithm for the pharmacologic management of T2DM