



DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION



Changing the Tide: A National Perspective on Diabetes Prevention

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The findings and conclusions in this presentation are those of the author and do not necessarily represent the views of the CDC.

SAFER • HEALTHIER • PEOPLE™

Vision

World free of the devastation of diabetes





**26 million
with Diabetes**



**79 million
with Prediabetes**

1 in 3 U.S. Adults Will Have Diabetes in 2050 ...

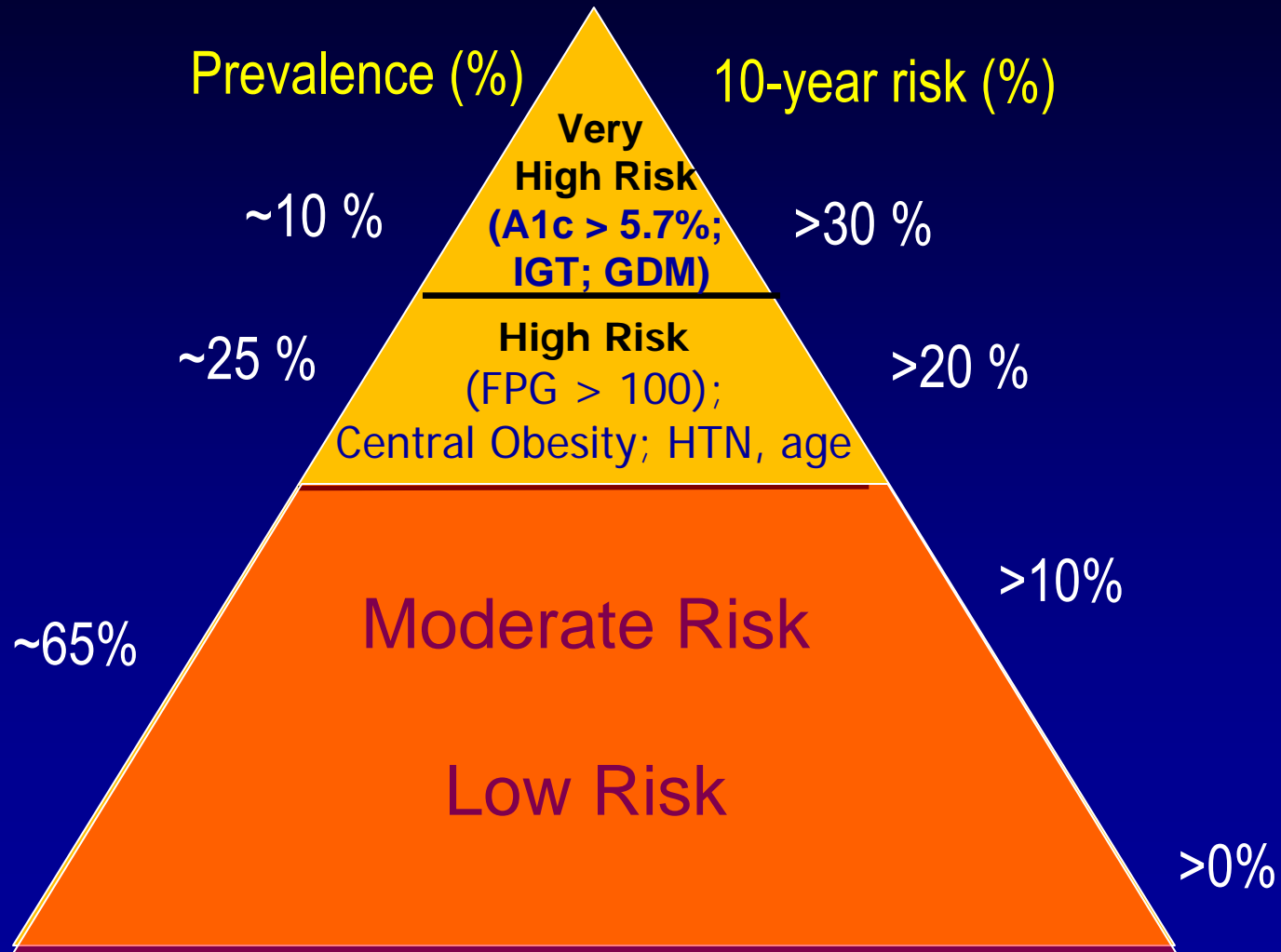
□ If current trends continue

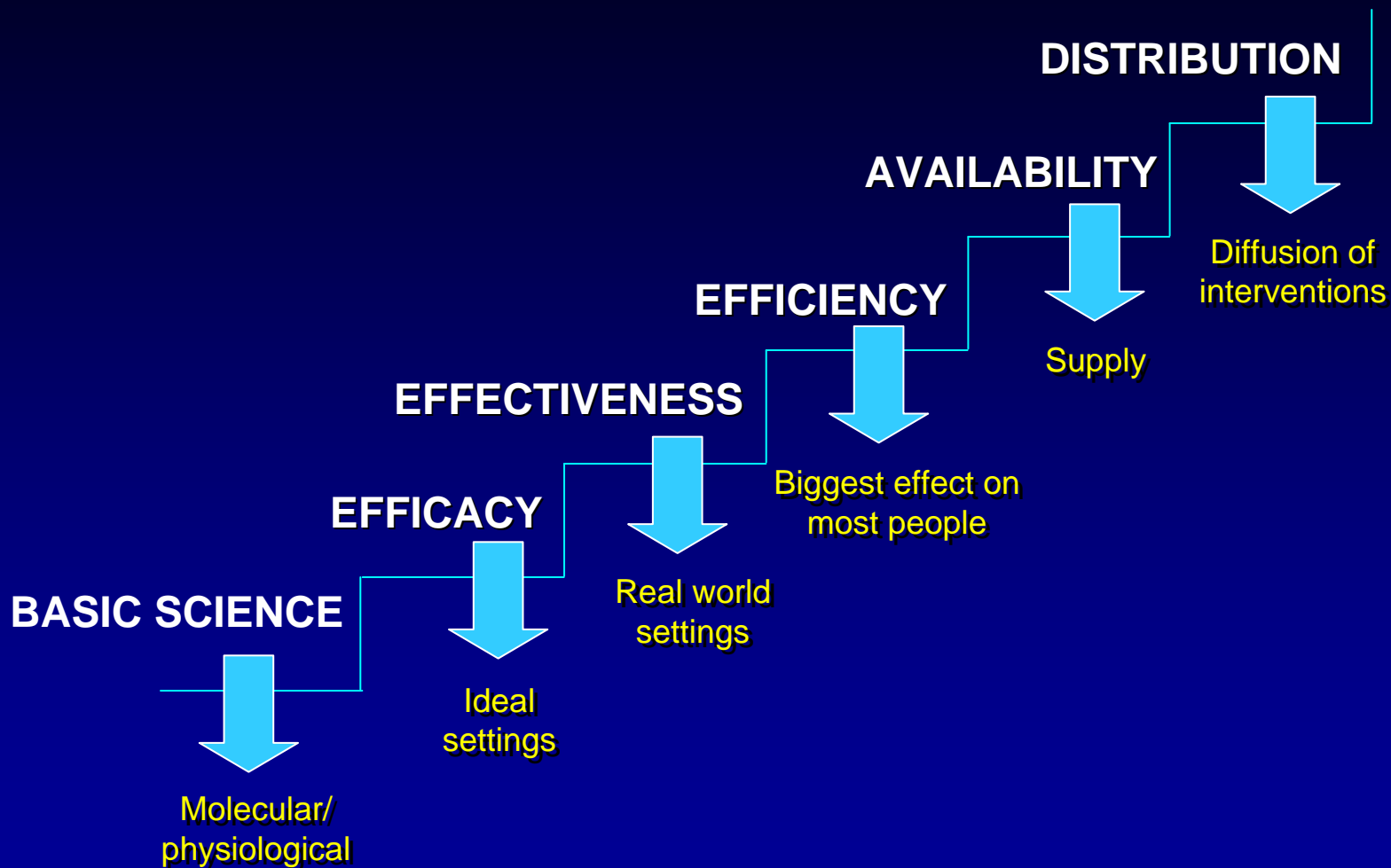
- Americans are living longer
- People with diabetes also are living longer
- Increases in minority groups at high risk for type 2 diabetes
- New cases of diabetes

□ 1 in 10 U.S. adults have diabetes now

Boyle, Thompson, Gregg, Barker, Williamson. Population Health Metrics 2010: 8:29 (22 October 2010)

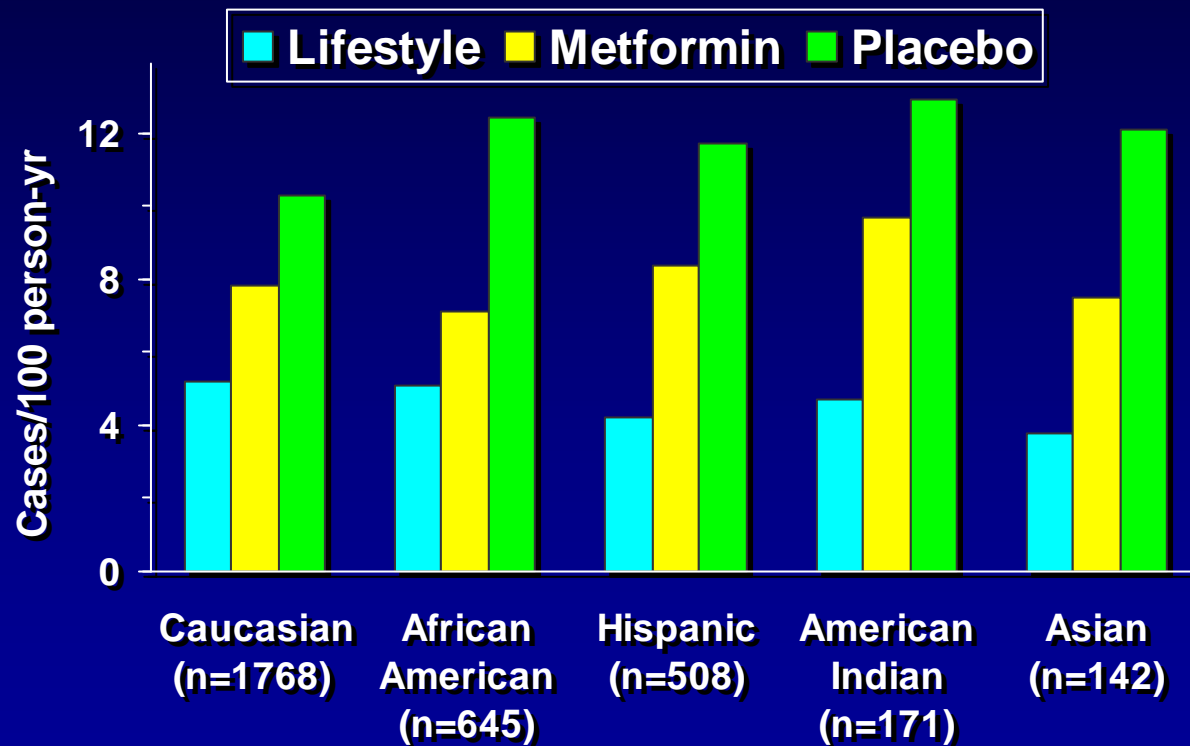
Risk Stratification Pyramid for Diabetes Prevention





Adapted from information in Sinclair JC, et al. N Engl J Med. 1981;305:489-494.
and Detsky AS, et al. Ann Intern Med. 1990;113:147-154.

DPP Intervention Impact by Ethnicity



The DPP Research Group, *NEJM* 346:393-403, 2002

Further Benefits of Lifestyle Intervention:

Other CVD risk factors are also improved

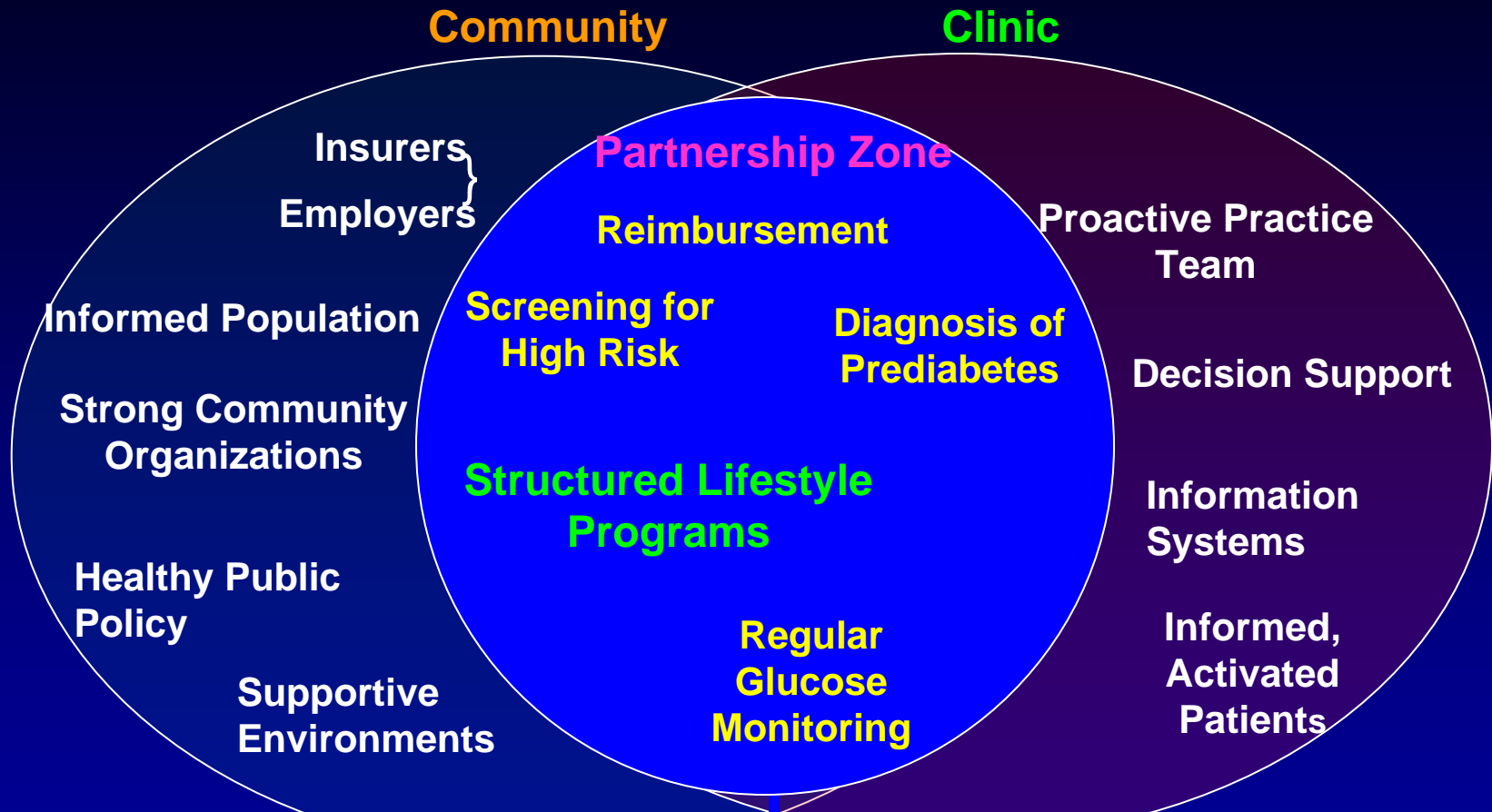
- ↑ BP was present in 30% of subjects at entry - then ↑ in placebo and metformin groups, significantly ↓ with lifestyle
- TG levels ↓ in all treatment groups, but ↓ significantly more with lifestyle intervention
- Lifestyle intervention significantly ↑ HDL level and ↓ LDL
- At 3 yr F/U the use of meds in the lifestyle group was 27–28% ↓ for hypertension and 25% ↓ for hyperlipidemia compared with placebo and metformin groups

Real-World Studies

- Analysis of 28 studies applying the findings of the DPP research study in real-world settings
- Average weight change was 4%
- Weight change was similar whether program was delivered by clinically trained professionals or lay educators
- Every additional lifestyle session attended, weight loss increased by 0.26 percentage point

Ali et al. Health Affairs, 2012

Prevention of Type 2 Diabetes The Community – Clinic Partnership Model



Total Population → **Pre-diabetes** → **Diabetes** → **Complications**

National Diabetes Prevention Program

- Systematically scale the translated model of the DPP for high risk persons in collaboration with community-based organizations that have necessary infrastructure, health payers, health care professionals, public health and others to reduce the incidence of type 2 diabetes in the U.S.
- In 2010 Congress authorized CDC to lead the National DPP

Principles Considered in Developing the National Diabetes Prevention Program

- Diabetes risk must match program cost
- Program must be effective
- Program must be economically sustainable
- Program must be available

National Diabetes Prevention Program

COMPONENTS



Training: Increase Workforce

Train the workforce that can implement the program cost effectively.



Recognition Program: Assure Quality

Implement a recognition program that will:

- Assure quality.
- Lead to reimbursement.
- Allow CDC to develop a program registry.



Intervention Sites: Deliver Program

Develop intervention sites that will build infrastructure and provide the program.



Health Marketing: Support Program Uptake

Increase referrals to and use of the prevention program.

Helpful Websites

- www.cdc.gov/diabetes
- www.cdc.gov/diabetes/prevention
- www.cdc.gov/diabetes/prevention/recognition
- www.dttac@emory.edu

Risk Level	10 year Diabetes Risk (%)	Risk Indicators	Intervention
Very High	30 to 40	A1c > 5.7% FPG > 110 FINDRISK 15+	Structured Lifestyle Intervention in Community Settings
High	20 to 30	FPG > 100 FINDRISK 12+ Ntl' DPP test 9+	
Moderate	10 to 20	2+ risk factors	Risk Counseling
Low	0 to 10	0-1 risk factor	Build Healthy Communities