



# SCIENTIFIC COMMUNICATION

VISUAL COMMUNICATION

# WHY IS VISUAL COMMUNICATION SO IMPORTANT FOR SCIENTISTS?

Time

Clarity

Consistency

Memory

# KEY PRINCIPLES TO DESIGN EFFECTIVE POWERPOINT SLIDES

**A single message**  
**stating the key message**  
**limiting text**  
**simple graphs**  
**signaling steps**  
**annotating data**  
**tools**

# HOW TO DESIGN A POSTER

## **step 1. the story**

Think about your storyline

## **step 2. the contents**

Make use of a clear structure

Fewer words

Make use of bullet points

Graphs and photos

## **step 3. the design**

Make use of negative space

Background

Contact information





# HOW TO DESIGN AN INFOGRAPHICS

1. what is an infographics?
2. creating an infographics

Develop a storyline

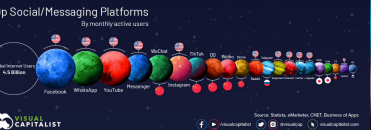
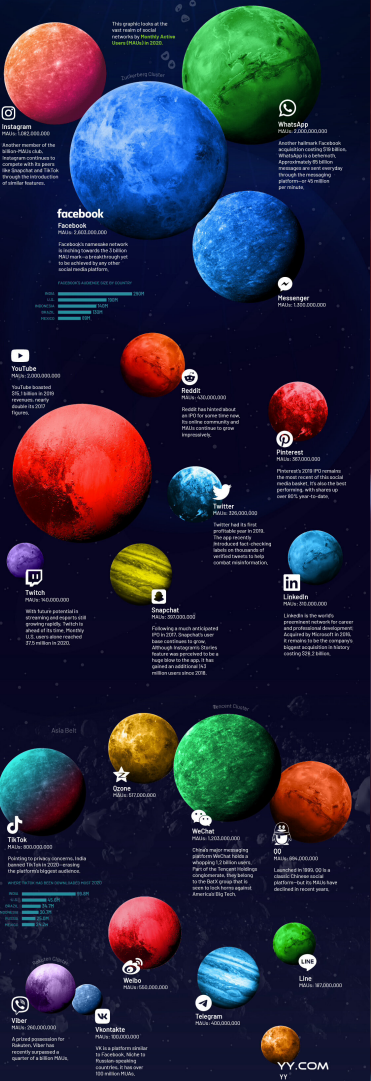
Elaborate a structure

Sketch a layout

# SOCIAL MEDIA UNIVERSE

2020

With 2.8 billion users worldwide—almost half the population—social media has seeped into virtually all aspects of modern life.



**Instagram**  
MAUs: 1,082,000,000

Another member of the billion-MAUs club, Instagram continues to compete with its peers like Snapchat and TikTok through the introduction of similar features.

**WhatsApp**  
MAUs: 2,000,000,000

Another hallmark Facebook acquisition costing \$19 billion, WhatsApp is a behemoth. Approximately 85 billion messages are sent everyday through the messaging platform—or 45 million per minute.

**Facebook**  
MAUs: 2,603,000,000

Facebook's namesake network is inching towards the 3 billion MAU mark—a breakthrough yet to be achieved by any other social media platform.

**Messenger**  
MAUs: 1,300,000,000

**Facebook's Audience Size by Country**

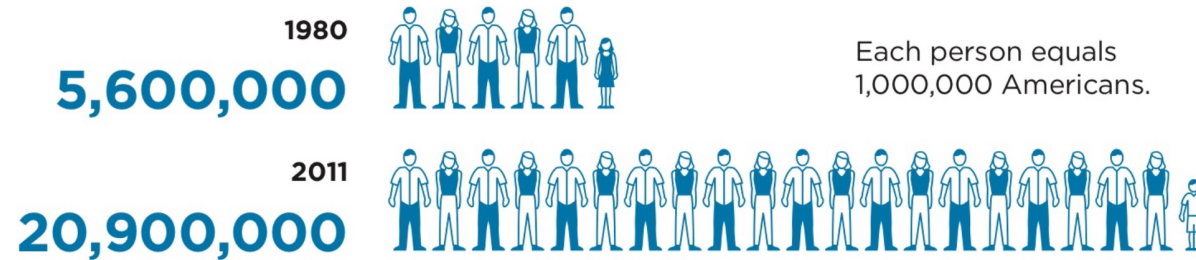
Country	Audience Size
India	290M
U.S.	190M
Indonesia	140M
Brazil	130M
Mexico	89M

# EXAMPLE

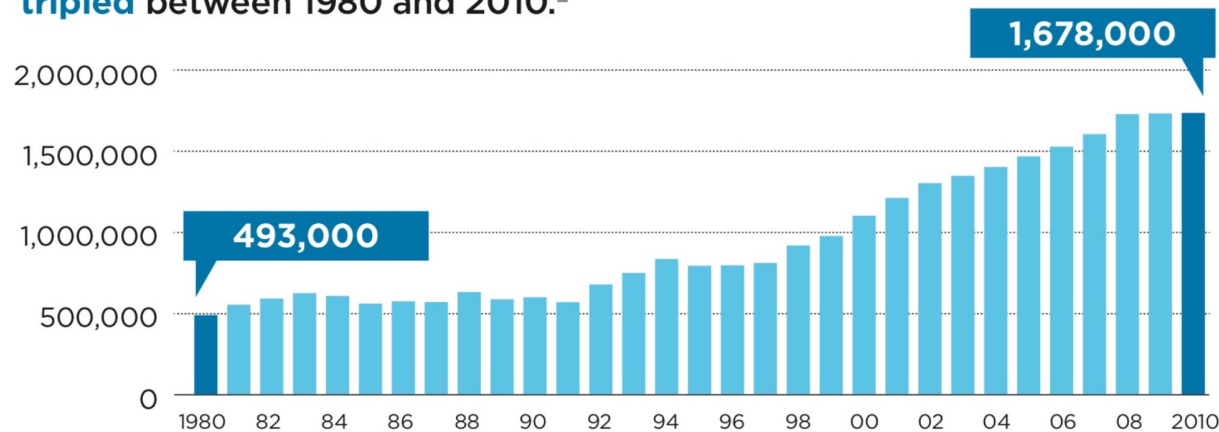
PROF. MASSIMO CECARO

# 1. Diabetes is a growing epidemic

The number of people with diagnosed diabetes increased from **5.6 million** in 1980 to **20.9 million** in 2011.<sup>1</sup>



The number of new cases of diabetes each year more than **tripled** between 1980 and 2010.<sup>2</sup>



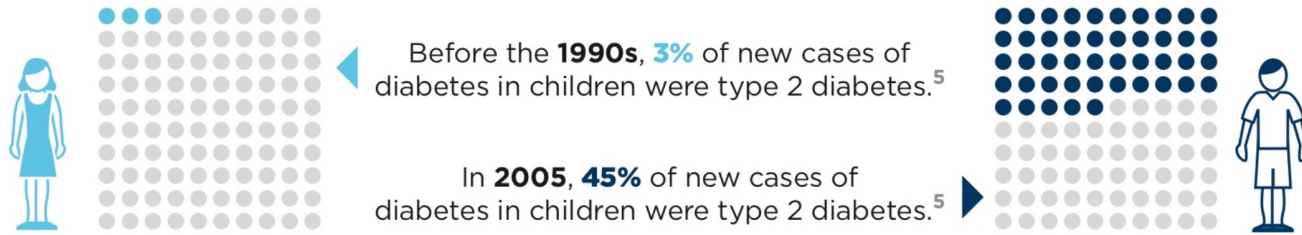
An estimated **1 in 3** children born after 2000 will develop diabetes.<sup>3</sup>

≈**52%** of the adult population in 2020 will have either diabetes or prediabetes.<sup>4</sup>

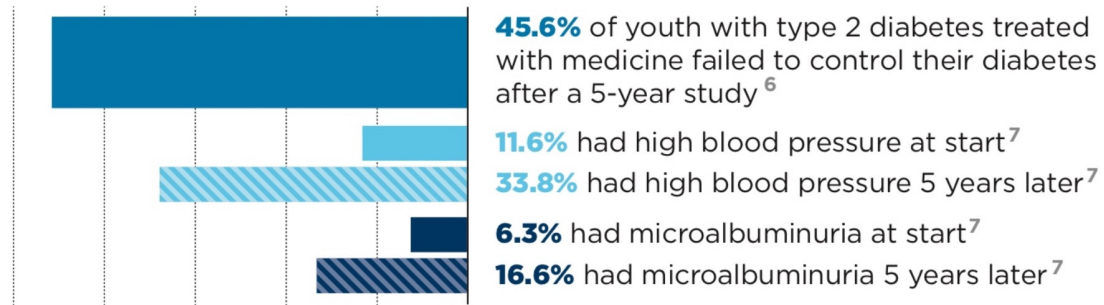
EXAMPLE

## 2. With a changing epidemiology

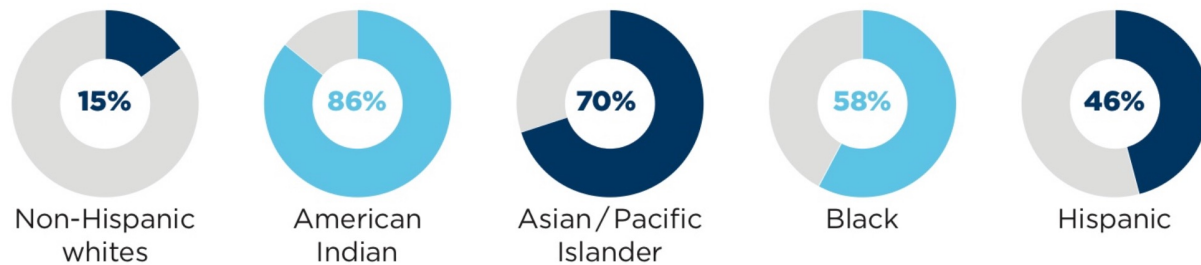
The way diabetes appears in our children is changing.



Youth with diabetes are failing to control their condition, even after being treated with medicine.<sup>6</sup>



Type 2 diabetes is more likely to be diagnosed in minority children and adolescents.<sup>8</sup>



Percentage of new cases of diabetes in youth that are type 2

# EXAMPLE



# 3. That we can help prevent

Research has shown that we can prevent or delay progression to **type 2 diabetes**. Simple changes in lifestyle can significantly reduce risk.<sup>9</sup>



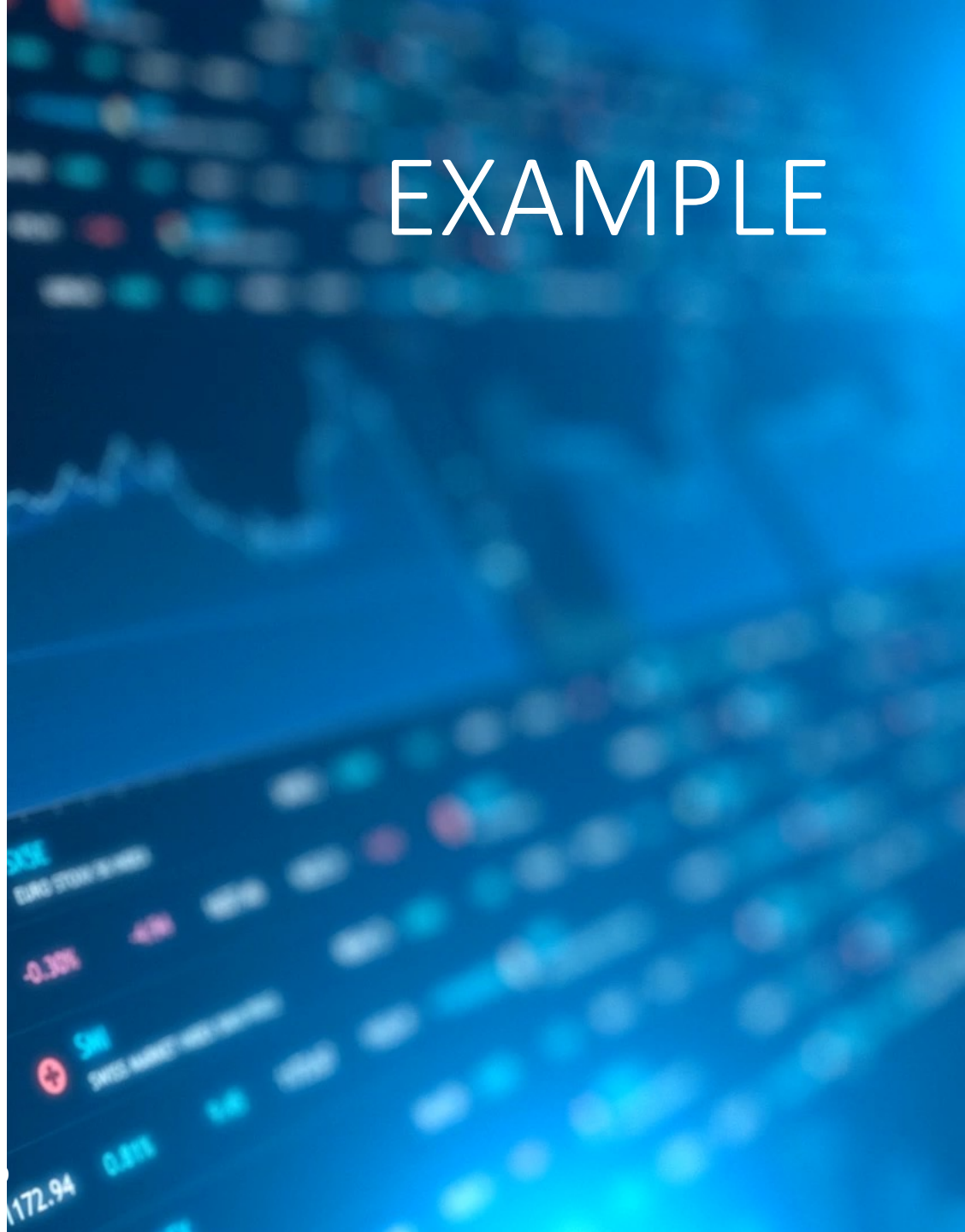
One study showed, together, these 2 lifestyle changes can reduce the risk of progressing from prediabetes to diabetes by **58%** in adults with prediabetes, overall, and by **71%** in adults aged 60+.<sup>10</sup>



The **National Diabetes Prevention Program**, under the direction of the Centers for Disease Control and Prevention (CDC), is a public-private partnership of community organizations, private insurers, employers, health care organizations, and government agencies that offers evidence-based diabetes prevention in local communities.<sup>11</sup> For example, the **YMCA** has nearly 700 sites in 39 states offering diabetes prevention programs.<sup>12</sup>



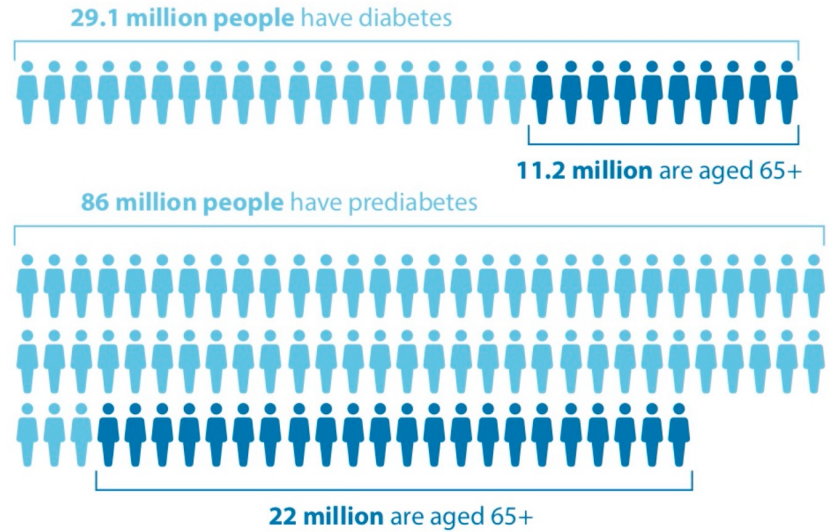
EXAMPLE



# The Diabetes Burden on Medicare How We Can Reduce It

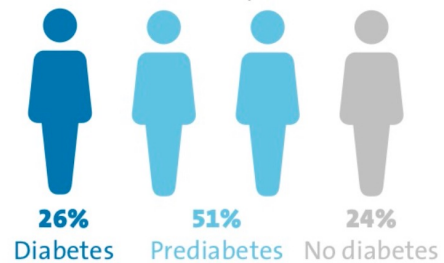


Diabetes is an epidemic problem affecting millions of Americans.

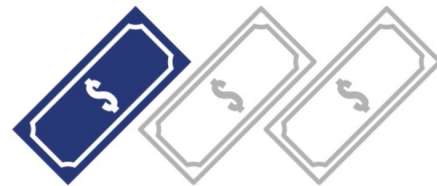


## Diabetes is overwhelming Medicare.

**3 out of 4** Americans with Medicare have diabetes or prediabetes



**1 out of 3** Medicare dollars is spent on diabetes



Sources: Centers for Disease Control and Prevention. National diabetes statistics report: estimates of diabetes and its burden in the United States, 2014. Centers for Medicare and Medicaid Services. Medicare health support (formerly CCIP). <https://www.cms.gov/Medicare/Medicare-General-Information/CCIP/index.html?redirect=/CCIP>. Updated March 8, 2012. Accessed October 12, 2015. The number of people aged 65 and older with prediabetes was calculated as 51% of 43.1 million (US Census Bureau estimate for all adults aged 65 and older in 2012)

# EXAMPLE

