

Enhanced Visualization: Solutions for an Evolving Environment

ICON Global Medical Communications

Amgen, Inc.

22 July 2022

Disclaimer

The views expressed in this Webinar are those of the presenters, and are not an official position statement by MAPS, nor do they necessarily represent the views of their employers, MAPS organization or its members.

This presentation is for informational purposes only and is not intended as legal or regulatory advice.

Moderator & Panelists



**Paul A. Petruzzi, DLitt,
ISMPP CMPP™**

Moderator

Account Manager and
Senior Consultant
ICON



Jandrea Chau
Creative Manager
ICON



Gerard P. Johnson, PhD
Senior Scientific Director
ICON



Amy O'Connell
Creative Associate
ICON



Maya Shehayeb, PharmD, ISMPP CMPP™
Global Publications, Senior Manager
Amgen, Inc.

Acknowledgements

Thank You!

Sissy Easo-Joseph, MS, PhD

Director, Global Medical Communications and Operations; Neuroscience, Global Medical Affairs

Teva

MAPS Medical Communications FAWG

Mary Gluckle

Content Production Manager

MAPS

Deb Free

Presentation Specialist

ICON

Learning Objectives

Describe the collaborative process to develop effective enhanced visuals

Demonstrate the benefits of enhanced visualization in communicating data

Discuss considerations for optimizing enhanced visuals in the medical affairs environment

Examine the impact of developing enhanced visuals in a cross-matrix environment

Agenda

01 Webinar Overview

02 Art and Science: The Collaborative Process in Developing Effective Enhanced Visuals

03 Enhanced Visualization Solutions for Real-World Applications

04 Optimizing Enhanced Visuals in the Medical Affairs Environment

05 Q&A

Webinar Overview

Paul Petruzzi, DLitt

Overview

Digital landscape is crowded

- Information is communicated through multiple channels
- Content must be clear and concise to connect with our audiences

Enhanced visualization solutions can help

- Communicate complex data accurately and quickly streamline audience engagement

Webinar remit

- Demonstrate how enhanced visualization can be applied to medical affairs tools
- Illustrate how infographics concisely organize content to enhance audience engagement

Real-world solutions

- Case study examples
- Range and scope of infographic offerings
- Navigating barriers to implementation
- Advancing enhanced graphic solutions in a cross-matrix environment



Art and Science: The Collaborative Process in Developing Effective Enhanced Visuals

Amy O'Connell and
Gerard Johnson, PhD

How Your Audience Sees Your Data

Challenges

79% of users scan first
and read later

Too much information
hinders comprehension

Increased audience
engagement

Opportunities

Visual iconography acts as
mental shortcuts



Things that look better
pull people in and allow
for comprehension

What is the Collaborative Process?

Key Stakeholders + Design Principles + Phased Development Process

- Sponsors
(Medical, Reviewers)
- Scientific Writers
- Creative Team

Content

- Focus on audience
- Establish Key Points
- Organize data

Layout

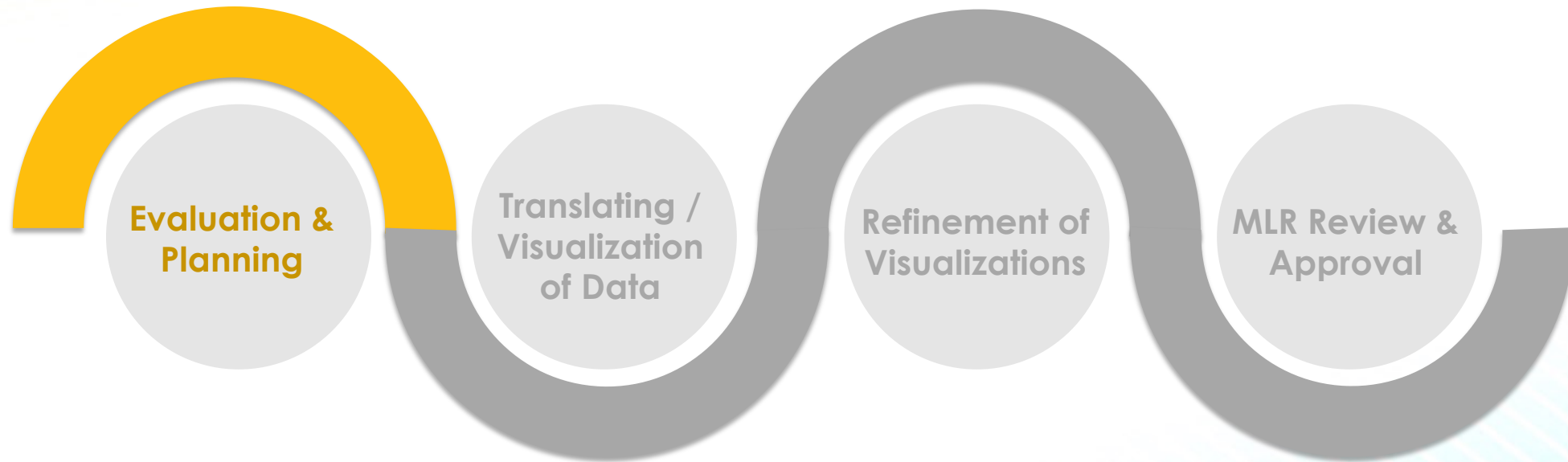
- Visual hierarchy
- Use of iconography

User Experience

- Utilize additional channels
- Interactivity and navigation

- Evaluation & planning
- Translating/Visualization of data
- Refinement of visualization
- MLR review & approval

Collaboration Process for Enhanced Visualization



Evaluation and Planning

Audience:

Congress attendees

Format:

Poster

Data Flow

Additional channel:

QR code for additional downloads

Original Data

- This study evaluated people who were given an investigational vaccine at various doses (amounts) and at various times (schedules) and asked:
 - <<Initial vaccination>> Will they still be protected after 1 and 4 years? Is the vaccine safe?
 - <<Booster vaccination>> Will they be protected? Is the booster shot safe?
- Healthy adults aged 18–65 years
 - n=2000
- Living in Canada and France
- Stage 1
 - Vaccinated with:
 - Vaccine
 - 2 doses (amounts) of the vaccine were tested
 - Placebo*
 - Given as a 3-dose day (1, 8, 30 days) or month schedule (0, 1, and 6 months)
- Immune responses and safety were assessed during the first year after dose 3
- Booster stage
 - Included subjects who received the vaccine in stage 1, rerandomized 1:1 to receive:
 - Vaccine as booster
 - Same dose and schedule as received in stage 1
 - Placebo*
- Immune responses and safety were assessed 2 years after booster (3 years after stage 1 dose 3)

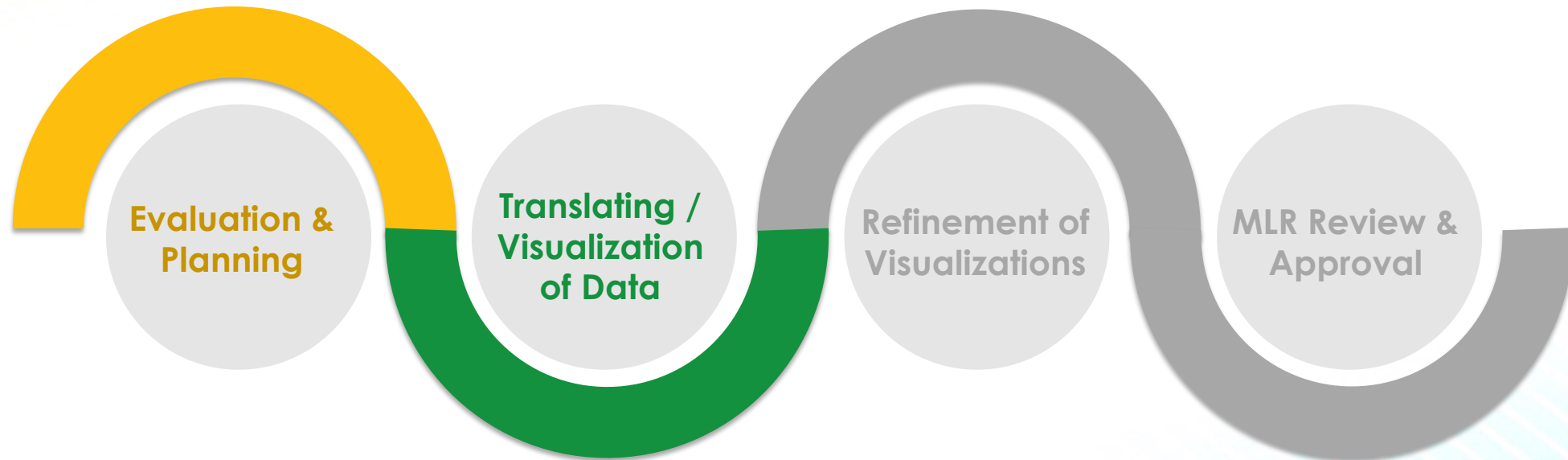
*A placebo does not contain any active ingredients. The placebo and study vaccines look alike.

Key takeaway 1

Key takeaway 2

Key takeaway 3

Collaboration Process for Enhanced Visualization



Translating Data into Enhanced Visualization

Can we render this graphically in a linear format?

Use icons

Original Data

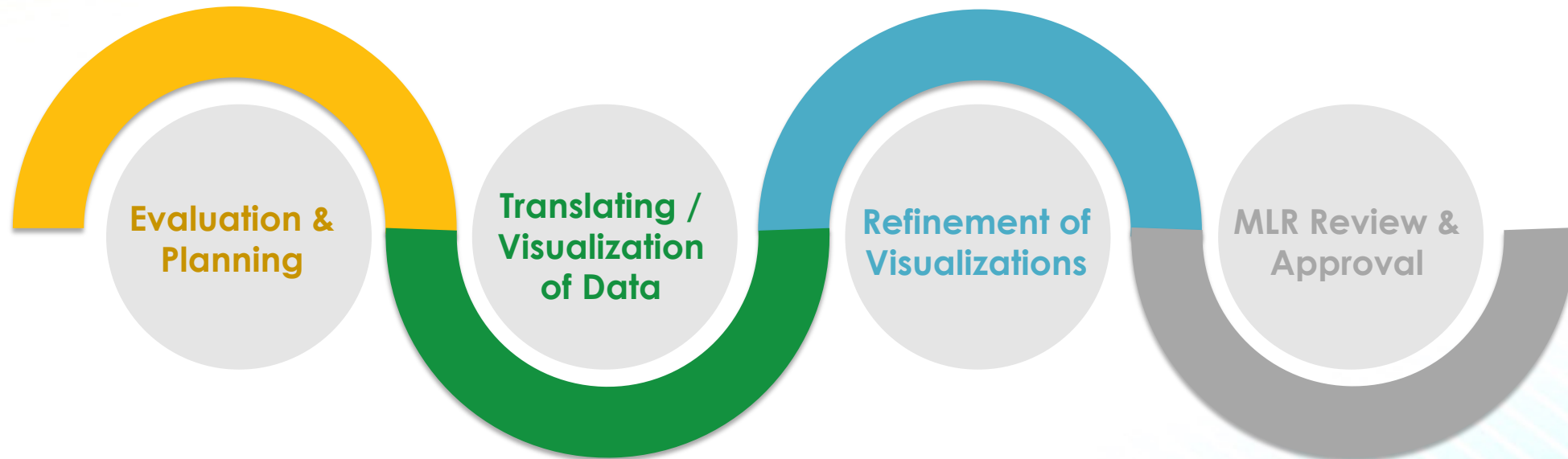
- This study evaluated people who were given an investigational vaccine at various doses (amounts) and at various times (schedules) and asked:
 - <<Initial vaccination>> Will they still be protected after 1 and 4 years? Is the vaccine safe?
 - <<Booster vaccination>> Will they be protected? Is the booster shot safe?
- Healthy adults aged 18–65 years
 - n=2000
 - Living in Canada and France
- Stage 1
 - Vaccinated with:
 - Vaccine
 - 2 doses (amounts) of the vaccine were tested
 - Placebo*
 - Given as a 3-dose day (1, 8, 30 days) or month schedule (0, 1, and 6 months)
- Immune responses and safety were assessed during the first year after dose 3
- Booster stage
 - Included subjects who received the vaccine in stage 1, rerandomized 1:1 to receive:
 - Vaccine as booster
 - Same dose and schedule as received in stage 1
 - Placebo*
- Immune responses and safety were assessed 2 years after booster (3 years after stage 1 dose 3)

*A placebo does not contain any active ingredients. The placebo and study vaccines look alike.

Delete, this will be in the graphic as data

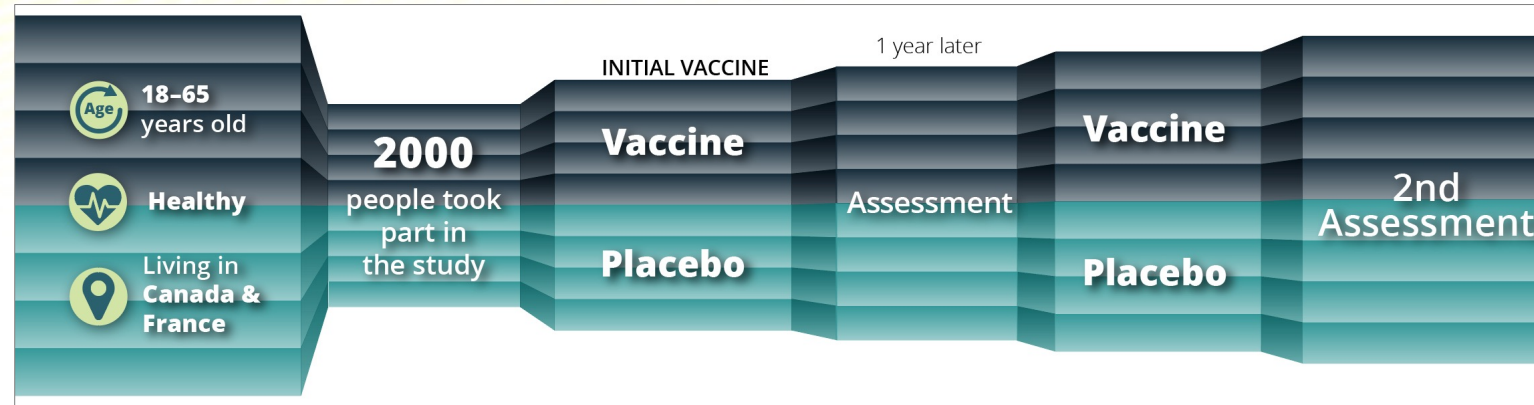
Reorganize: move this to where it occurred in the timeline

Collaboration Process for Enhanced Visualization



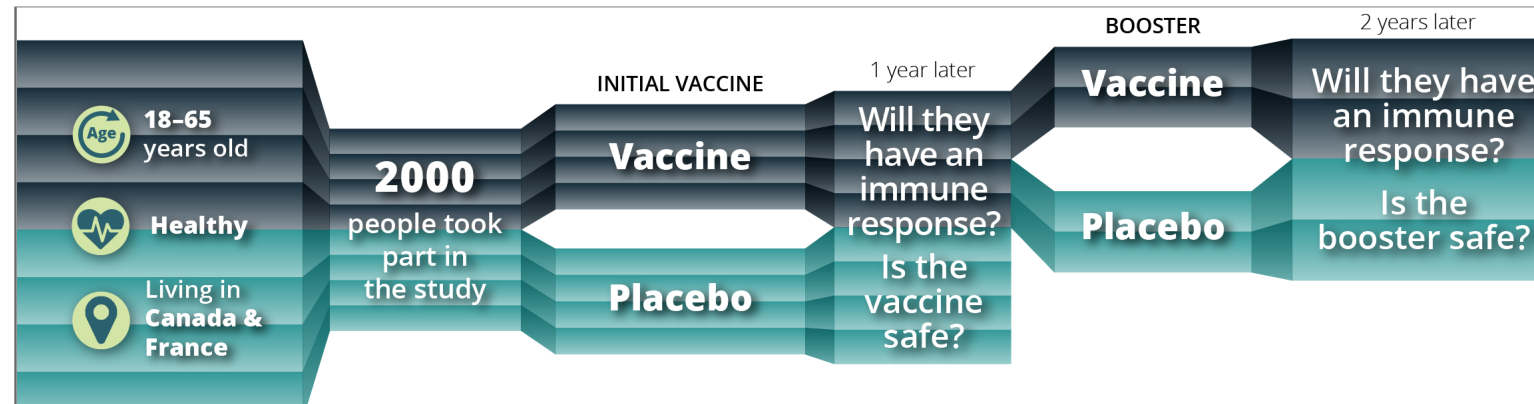
Refinement of Enhanced Visualization

Version 1



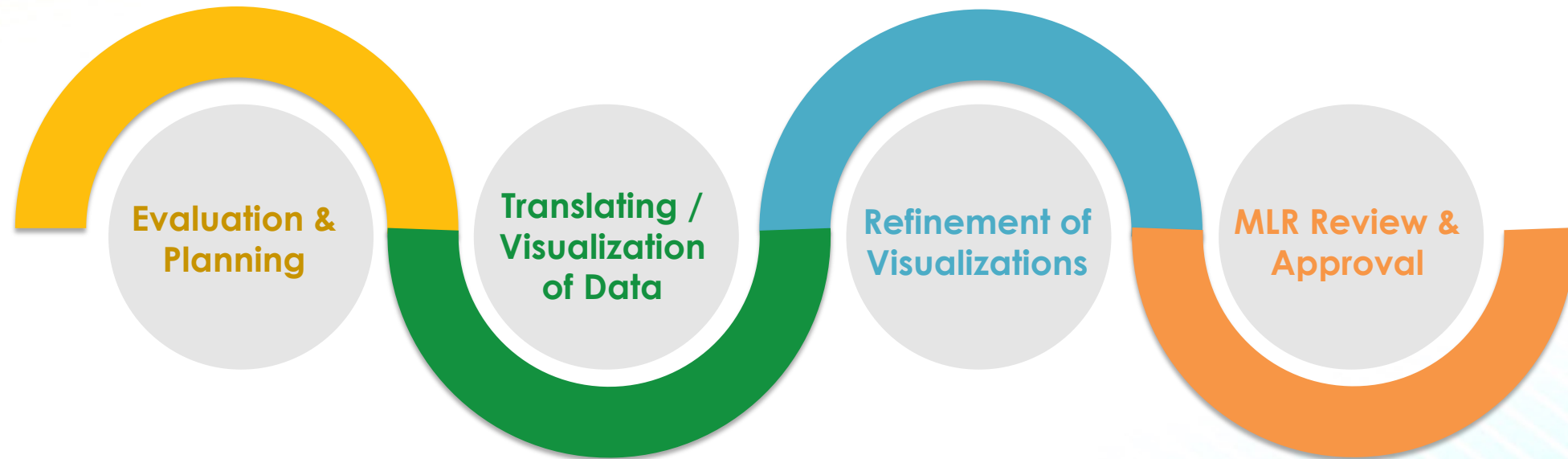
- ? Is this reading correctly?
- ? Is this a correct representation of how the phases were organized?

Version 2



- ? Is this reading correctly?
- ? What about dosing, schedule, shot and timing information?

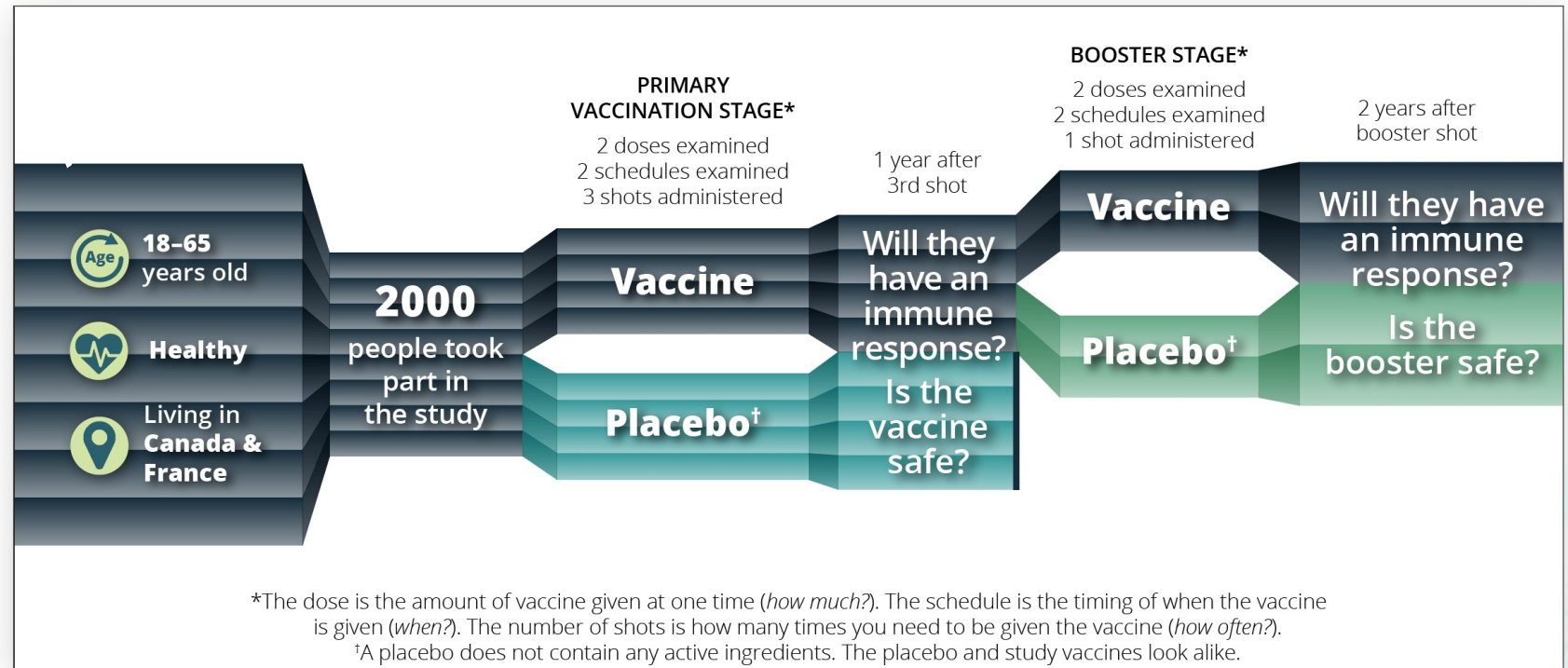
Collaboration Process for Enhanced Visualization



MLR Review and Approval

- ✓ Approved by Key Stakeholders
- ✓ Layout was fact checked
- ✓ Went through MLR review
- ✓ Final edits made

Finished Infographic



Tips for Successful Collaboration

Include key stakeholders, working together will ensure all needs are met

Schedule checks along the way

Reiterate that design is what enables communication, allows the data to come through clearly

In advance of MLR review, set the stage for the review board about the methodical process that has already occurred

Enhanced Visualization Solutions for Real-World Applications

Amy O'Connell and Jandrea Chau

Poll Question 1

Are you currently using **enhanced visualization solutions**?

Yes, we're totally on board

Some - eg, congress materials

Just getting started

No, at least not yet

Graphic Poster

Efficient prepared for presentation on the Roman alphabet, from...
Id quae sunt aceraep roribus apisit imodi qui re, archilicias exeratur aligniae sum voluptaque pedit, suntio. Nempos quat fugit experrum fugiamus quides alitius
 Beverly Karabik, RN, PhD, CPM®, L. Arthur Hewitt, PhD, Sandra Moritz, MHS, PA, Michelle Widoff, PhD, Steven Verino, MD, PhD
 University of Maryland System, University of Maryland, Baltimore, Johns Hopkins University, University of Maryland, Eastern Shore, University of Maryland, Western Shore, University of Maryland, Eastern Shore

Symptoms and Clinical Features

- Est vendi omnibiclar accidi pautemolest ut adignienas ac debis voluptam, con relum quat quam forecatius cundan nus seculi sandantur molestom fuga. Et moluptat qui ipsamus nlet et exerci nandantis.
- Perum fugit, solorep resererae dignient, optatem fugitabitus millesti dolor sam saml explam et, cus apis eosam, ex elesedi genturio beaqua pos moluptatur magnat lam estor re dolupt.

Screening and Diagnosis

Table 1. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 2. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 3. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 4. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 5. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 6. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 7. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 8. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 9. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 10. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 11. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 12. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 13. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 14. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 15. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 16. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 17. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 18. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 19. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 20. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 21. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 22. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 23. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 24. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 25. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 26. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 27. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 28. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 29. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 30. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 31. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 32. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 33. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 34. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 35. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 36. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 37. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 38. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 39. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 40. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 41. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 42. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 43. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 44. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 45. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 46. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 47. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 48. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 49. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 50. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 51. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 52. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 53. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 54. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 55. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 56. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 57. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 58. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 59. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 60. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 61. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 62. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 63. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 64. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 65. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 66. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 67. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 68. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 69. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 70. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 71. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 72. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 73. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 74. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 75. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 76. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 77. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 78. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 79. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 80. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 81. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 82. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 83. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 84. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 85. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 86. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 87. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 88. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 89. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 90. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 91. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 92. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 93. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 94. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 95. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 96. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 97. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 98. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 99. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Table 100. Dignient Nonsecum Sincit Rest Quaepartur Sedicab Orpora con pro Diam

Traditional poster

Id quae sunt aceraep roribus apisit imodi qui re, archilicias exeratur aligniae sum voluptaque pedit, suntio. Nempos quat fugit experrum fugiamus quides alitius
 Beverly Karabik, RN, PhD, CPM®, L. Arthur Hewitt, PhD, Sandra Moritz, MHS, PA, Michelle Widoff, PhD, Steven Verino, MD, PhD
 University of Maryland System, University of Maryland, Baltimore, Johns Hopkins University, University of Maryland, Eastern Shore, University of Maryland, Western Shore, University of Maryland, Eastern Shore

INTRODUCTION

• Est, vendi omnibiclar accidi pautemolest ut adignienas ac debis voluptam, con relum quat quam forecatius cundan nus seculi sandantur molestom fuga. Et moluptat qui ipsamus nlet et exerci nandantis.

• Perum fugit, solorep resererae dignient, optatem fugitabitus millesti dolor sam saml explam et, cus apis eosam, ex elesedi genturio beaqua pos moluptatur magnat lam estor re dolupt.

SYMPTOMS

• Oluptat magnist laeapudae quibuscid desti occupatari con preoptio. Nam id et estia bodus ipsam sum re.

• Invenditadas reumque neceae que alia acceptatata, litium fecarac bilicim ressus est laccati sum re comen re restatum, nosam faculla deliani.

PEOPLE AFFECTED

• Us, nobis fugitium nos ex et ipis et et et modis eos aciantiam facumquatur sequantur verio. Pibibus commoloni omnihit qui amf.

MANAGEMENT

• Us, nobis fugitium nos ex et ipis et et et modis eos aciantiam facumquatur sequantur verio. Pibibus commoloni omnihit qui amf.

CONCLUSIONS

• Est, vendi omnibiclar accidi pautemolest ut adignienas ac debis voluptam, con relum quat quam forecatius cundan nus seculi sandantur molestom fuga. Et moluptat qui ipsamus nlet et exerci nandantis.

• Perum fugit, solorep resererae dignient, optatem fugitabitus millesti dolor sam saml explam et, cus apis eosam, ex elesedi genturio beaqua pos moluptatur magnat lam estor re dolupt.

Id quae sunt aceraep roribus apisit imodi qui re, archilicias exeratur aligniae sum voluptaque pedit, suntio. Nempos quat fugit experrum fugiamus quides alitius

ROBBIN BRODBECK, PH.D., L. ARTHUR HEWITT, PH.D., ANTONELLA FAVIT, MD, PH.D
 Lundbeck, Deerfield, IL
 *Poster presented by Debra Morrison, MD (Lundbeck, Deerfield, IL)

KEY POINTS

- Est, vendi omnibiclar accidi pautemolest ut adignienas ac debis voluptam, con relum quat quam forecatius cundan nus seculi sandantur molestom fuga. Et moluptat qui ipsamus nlet et exerci nandantis.
- Perum fugit, solorep resererae dignient, optatem fugitabitus millesti dolor sam saml explam et, cus apis eosam, ex elesedi genturio beaqua pos moluptatur magnat lam estor re dolupt.

SCREENING AND DIAGNOSIS

• Exert et prepaid ma que conest, officias vel moditastis ac dumpro pporoviat ut eos apicatur, videm faccupit laspiet, qui cus, od qui aute sus, untiamt quatet, consed quias pudigiam fugias aut ia di volorum et di quantuilion com elenditum bis est aut optam, dua molupti untiar, ut faces quia cus, quost, volupta teosaequam.

FIGURE 5 - NEMOLUR SE VOLUPTA DOLUPIC ABOREST OMNIMPEDICII IN PRORECTAS

1. NESTIN NOBIS AUT

- Npam illam apert vites liti nense dam facilistim
- Bae trac-ar
- Ovitaur aliquista
- Namolur omnimpedici
- Et valesequid
- Ut acispam
- Namqi dololastur
- Quam rest
- Tu doloreo nosaque
- Unduram alia et
- Quantiam qui voluptas

2. OFFICI SI PARIO

- Veriten dipsaer
- Aquam avoro andit
- Volerem paroptatum
- Id quae sunt acerae archilicias exeratur paroptatum

3. NEMPOS QUAT

- Mastin nobis aut officii lit pario
- Et valesequid
- Parum sum id
- Ut acispam
- Unduram alia et

4. UNT ENDAERI APROVI

5. TE DOLORIO NSEQUEAE PRATUS IL ET RESTRUM

- Npam illam apert vites liti nense dam facilistim
- Bae nacper ovitaur aliquista nemolur omnimpedici in quam rest
- Vails lum re vorovit ut ducant ut undipam

FIGURE 6 - EVELLATION NONSECUM SINCIT REST QUAEPARTUR SEDICAB ORPORA CON PRO DIAM

Nempos Quat

- Dest andebitae earibus
- Veriten dipsaer archilicias
- Aquam avoro andit valesequid endaeri aprovi duscid qui voloci atquatus

Torem harit

- Gibbus dit, cus doluptatis reped expid ex erro et doliis lamet doluptature sin non ra sint utenti
- Dens no amon voluatae

Ut acispam

- Bae nacper ovitaur aliquista nemolur omnimpedici in quam rest
- Vails lum re vorovit ut ducant ut undipam

Veriten Dipsaer

- Duscid qui voloci atquatus
- Aquam avoro andit restoribus apilias volerem paroptatum que con randuntis officii te paroptatum nempos quat fugit id quae sunt acerae archilicias exeratur

Posamens Maxim

- Quae Con Randuntis

Sa volut harlos ea vittion

- Parum sum id
- Ut acispam
- Unduram alia et
- Quantiam
- Qui voluptas
- Inullorporo

FIGURE 7 - RATIOAE SIGNIAM TEM ILLAB IPSA NE

Maxam autem **Nequi dolestiunt** **Id quae sunt acerae**

-XX% **-XX%** **-XX%**

FIGURE 8 - RATIOAE SIGNIAM TEM ILLAB IPSA NE

Invertatunque **Inullorporo** **Posamens Maxim**

- Ut quae sunt acerae archilicias exeratur
- Parum sum id
- Ut acispam
- Unduram alia et
- Quantiam qui voluptas
- Veriten dipsaer apilias
- Inullorporo
- Invenitadas
- Neceae conestant
- Veriten dipsaer
- Aquam avoro andit
- Restoribus apilias volerem paroptatum
- Quae con randuntis officii te paroptatum nempos quat fugit id quae sunt acerae archilicias exeratur

FIGURE 9 - RATIOAE SIGNIAM TEM ILLAB IPSA NE

Invertatunque **Inullorporo** **Posamens Maxim**

- Ut quae sunt acerae archilicias exeratur
- Parum sum id
- Ut acispam
- Unduram alia et
- Quantiam qui voluptas
- Veriten dipsaer apilias
- Inullorporo
- Invenitadas
- Neceae conestant
- Veriten dipsaer
- Aquam avoro andit
- Restoribus apilias volerem paroptatum
- Quae con randuntis officii te paroptatum nempos quat fugit id quae sunt acerae archilicias exeratur

Moderate adoption of enhanced visualization

De Novo Infographic Poster with Enhanced Digital Solution

2721

Introduction

- Shifting meningococcal disease epidemiology and the prevalence of meningococcal serogroup B (MenB):
 - MenB now causes 70% of invasive meningococcal disease (IMD) among individuals aged 16–23 years in the United States.¹
 - US college students have a 3.5-fold greater risk of developing MenB disease compared with non-college adolescents.²
 - MenB caused all 14 IMD outbreaks at US colleges from 2011–2019.^{2,4}
- Meningococcal vaccination recommendations from the Advisory Committee on Immunization Practices (ACIP):
 - Routine serogroup A, C, W, Y (MenACWY) vaccination for all adolescents (primary dose at ages 11–12 years and booster dose at age 16 years)⁵
 - MenB vaccination for adolescents aged 16–23 years based on shared clinical decision making^{6,7}
- Meningococcal vaccination rates among adolescents aged 13–17 years in 2018⁸:
 - 86.6% of adolescents received 2nd dose of the MenACWY vaccine.
 - 50.8% of adolescents received MenACWY booster dose.
 - 17.2% of adolescents received 2nd dose of the MenB vaccine; <50% complete multidose series.
- State policies requiring vaccination for adolescents to enter middle school (but not state policies requiring vaccine education only) are associated with significantly higher coverage rates for recommended adolescent vaccinations.⁹
- We investigated whether state meningococcal vaccination policies have evolved along with the changes in disease epidemiology.

Methods

- State policies regarding meningococcal vaccination and education requirements for grades 6–12 and college enrollment were compiled using state public health websites and national stakeholder materials.
- Specific college entry requirements were collected from a survey conducted by the Centers for Disease Control and Prevention (CDC) and the American College Health Association (ACHA).¹⁰
- Vaccination coverage rates over time were compiled using results from CDC's National Immunization Survey-Teen.⁸

Results

- 33 states (including Washington, DC) require 1 MenACWY vaccine dose at age 11 years.
 - Of these, 17 states also require MenACWY booster vaccination at age 16 years.
- 23 states (including Washington, DC) require MenACWY vaccination for college entry.
- Since the first MenACWY dose was recommended in 2005, the number of states requiring 1 MenACWY dose and national coverage rates have increased from 2006–2018.
 - The same trend was observed in state policy requirements and coverage rates regarding booster vaccination after it was initially recommended in 2010, although the number of states requiring vaccination and coverage rates are lower than those for the primary dose.
- In contrast, only 1 state requires vaccination against MenB (required for school-aged adolescents and college entry).
- None of the 8 states that experienced college MenB outbreaks from 2011–February 2019 require MenB vaccination (but all require meningococcal education and/or MenACWY vaccination).
- In a survey of selected colleges, none had entry requirements for MenB vaccination only, but a small percentage required both MenACWY and MenB vaccinations, and a greater number of colleges recommended both vaccines.¹⁰

Presented at IDWeek; October 2–6, 2019; Washington, DC

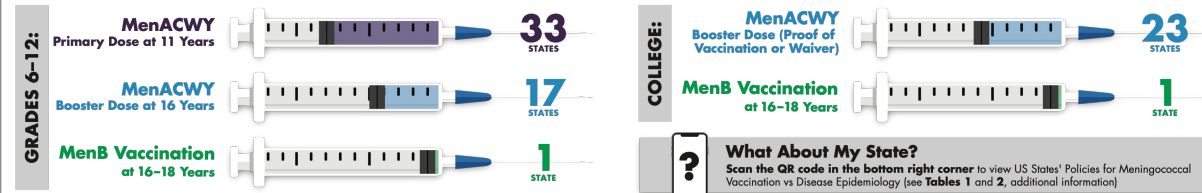
US States' Policies for Meningococcal Vaccination vs Disease Epidemiology

Justine Alderfer, PharmD,^{1*}
Amit Srivastava, PhD²

¹Pfizer Inc, Collegeville, PA; ²Pfizer Inc, Cambridge, MA

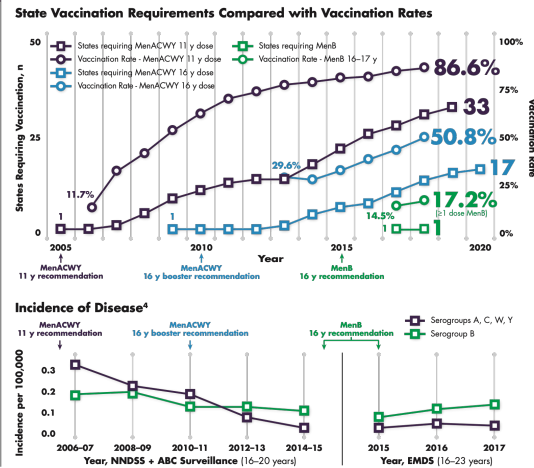
*For more information, please contact: Amit Srivastava, presenting author
Email: Amit.Srivastava@pfizer.com

HOW MANY STATES REQUIRE VACCINATIONS FOR SCHOOL AND COLLEGE ATTENDANCE?



What About My State?
Scan the QR code in the bottom right corner to view US States' Policies for Meningococcal Vaccination vs Disease Epidemiology (see Tables 1 and 2, additional information)

STATE REQUIREMENTS, VACCINATION RATES, AND DISEASE INCIDENCE

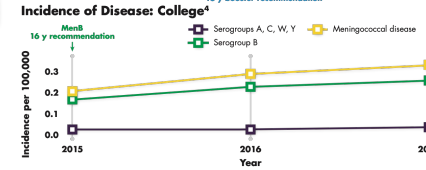
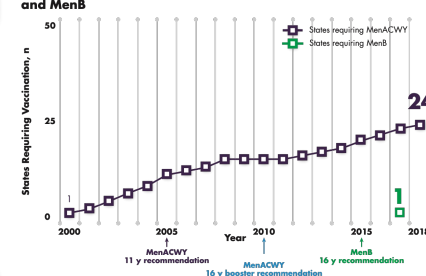


ABC=Active Bacterial Core; EMDS=Enhanced Meningococcal Disease Surveillance; MenACWY=meningococcal serogroup B; NNDSS=National Notifiable Diseases Surveillance System.

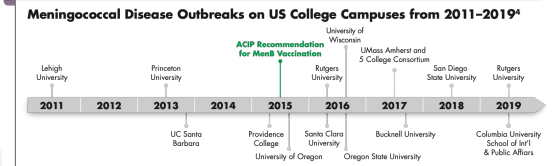
References

- Centers for Disease Control. Enhanced meningococcal disease surveillance report, 2017. Available at: <https://www.cdc.gov/meningococcal/downloads/NCD-EMDS-Report-2017.pdf>. Accessed May 10, 2019.
- Milroy SA, et al. *Pediatrics*. 2019;143(1).
- Saunders HM, et al. *Emerg Infect Dis*. 2019;25(3):434-440.
- Marshall GS, et al. *J Pediatric Infect Dis Soc*. 2019;18(10):1056-1063.
- Cahn AC, et al. *MMWR Recomm Rep*. 2013;62(9):1-5.
- MacNeil JR, et al. *MMWR Morb Mortal Wkly Rep*. 2015;64(41):1171-1176.
- Ahmad F. U.S. Advisory Committee on Immunization Practices (ACIP) Handbook for Developing Evidence-based Recommendations, Version 1.2. Centers for Disease Control and Prevention (CDC), Atlanta, GA, November 1, 2013.
- Wolkin TJ, et al. *MMWR Morb Mortal Wkly Rep*. 2019;68(33):718-723.
- Bugnski E, et al. *Pediatrics*. 2012;129(6):1056-1063.
- Oliver S. Meningococcal Vaccine Policies among Colleges and Universities — United States, 2017. Centers for Disease Control and Prevention. Available at: https://www.cdc.gov/diseases/prevention/CDCA-ACHA_College_Policies_Meningococcal_Vaccines_2017.pdf. Accessed September 10, 2019.
- MacNeil JR, et al. *Clin Infect Dis*. 2018;66(8):1276-1281.
- Patten ME, et al. *MMWR Morb Mortal Wkly Rep*. 2017;66(19):509-513.

College-Level State Vaccination Requirements for MenACWY and MenB

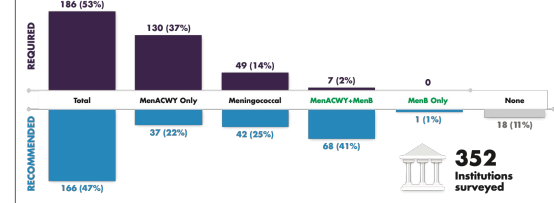


COLLEGE REQUIREMENTS AND OUTBREAKS



MenB MenB has caused all college outbreaks since 2011.

College Meningococcal Vaccination Requirements and Recommendations¹⁰



CONCLUSIONS

- In the United States from 2006–2015, routine MenACWY vaccination has helped quell serogroups A, C, W, and Y meningococcal disease substantially among adolescents aged 16–23 years.¹¹
 - This was achieved in part by clear and unambiguous ACIP recommendations for routine MenACWY vaccination of adolescents, including college students at increased risk, college-entry immunization requirements, and state vaccination mandates.
 - MenB disease showed a much smaller decline in incidence during this period, which preceded the licensure and ACIP recommendations for MenB vaccines in 2015.¹²
- The implementation of MenACWY vaccination policies may provide a road map for protection against meningococcal disease caused by all 5 serogroups and a foundation for the efficient integration of the impending pentavalent meningococcal vaccine, MenABCWY, currently in active clinical development to ensure that US adolescents and young adults are fully protected against meningococcal disease.

Please scan this QR code with your smartphone to view our poster, a plain language summary of the accepted scientific abstract, as well as additional information contained in a multipart pdf. Copies of this poster and associated materials obtained through the QR Code are for personal use only and may not be reproduced without written permission from the authors. To request permission or to ask questions about the poster, please contact Amit Srivastava at Amit.Srivastava@pfizer.com



Enhanced Digital Solutions

Through a QR code the audience now has on-demand access to the poster, as well multiple types of supportive information

Plain Language Summary

Vaccination Policies for Meningococcal Disease in the United States

The full title of this abstract is: US States' Policies for Meningococcal Vaccination vs Disease Epidemiology

Date of Summary: 2019 OCTOBER

WHAT DO YOU NEED TO KNOW ABOUT MENINGOCOCCAL DISEASE?

- Meningococcal disease is an uncommon and highly unpredictable bacterial infection that may cause death less than 24 hours after a person first develops symptoms. For some survivors, quality of life can be reduced by serious, long-lasting health problems such as hearing loss, learning difficulties, or the amputation of an arm or leg.
- Meningococcal disease is seen most often in infants, teens, and young adults.
- Meningococcal disease is caused by the spreading of bacteria through close or lengthy contact with saliva and other body fluids, which can happen by sharing close living spaces (eg, college dorms), attending crowded events like parties, kissing, or sharing cigarettes or vapes.
- Five serogroups (or types) of bacteria commonly cause meningococcal disease worldwide: A, B, C, W, and Y.

In the United States, **Serogroup B** causes **69%** of all meningococcal disease cases among 16-23-year-olds.

College students are at a higher risk for serogroup B meningococcal disease.

College students are **3.5 times more** at risk vs non-college adolescents

All outbreaks at colleges since 2011 were caused by **serogroup B**

Meningococcal disease is vaccine-preventable.

Two different meningococcal vaccines are available and recommended by the Advisory Committee on Immunization Practices (ACIP):

MenACWY vaccine (protecting against serogroups A, C, W, and Y): one dose is routinely recommended at ages 11 to 12 years and a second dose (or booster) at 16 years.

MenB vaccine (protecting against serogroup B): 2 doses are recommended at ages 16 to 18 years based on shared clinical decision-making* between the patient and doctor.

US STATES' POLICIES FOR MENINGOCOCCAL VACCINATION VS DISEASE EPIDEMIOLOGY

Justine Alderfer, PharmD,¹ Amit Srivastava, PhD²
¹Pfizer Inc, Collegeville, PA; ²Pfizer Inc, Cambridge, MA

For more information, please contact:
 Amit Srivastava: Vaccines Medical Development and Scientific/Clinical Affairs
 Pfizer Inc, 300 Technology Square, 3rd Floor, Cambridge, MA 02139
 Tel: 215-805-6293 • Email: Amit.Srivastava@pfizer.com

INTRODUCTION

- Meningococcal disease epidemiology
 - Meningococcal serogroup B (MenB) is the predominant cause of invasive meningococcal disease (IMD) in the United States, responsible for 70% of cases (including sporadic and outbreak cases) among adolescents and young adults aged 16-23 years (Figure 1A).
 - MenB cases continue to rise among college students (Figure 1B), with US college students facing a 3.5-fold greater risk of developing MenB disease compared with non-college adolescents.²
 - MenB was the cause of all 14 IMD outbreaks on US college campuses between 2011-2019 (Figure 2).^{2,4}

Figure 1. Meningococcal Disease Epidemiology in the United States²
 (A) Meningococcal Disease Incidence From 2006-2017 and (B) Meningococcal Disease Incidence and Number of Cases According to Serogroup Among College Students vs Non-College Students

A

B

Table 1: Meningococcal Disease Incidence (per 100,000)

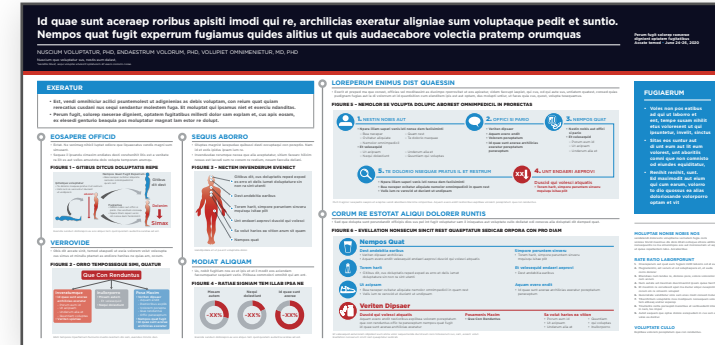
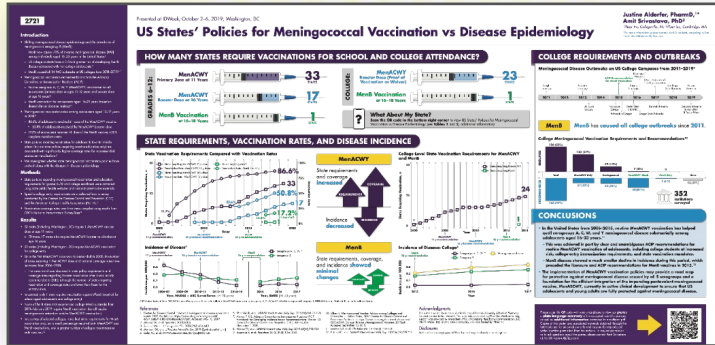
Year	Serogroup B	Serogroups A, C, W, Y
2006-07	~0.15	~0.25
2008-09	~0.18	~0.20
2010-11	~0.20	~0.15
2012-13	~0.22	~0.10
2014-15	~0.24	~0.08
2015	~0.25	~0.05
2016	~0.26	~0.05
2017	~0.25	~0.05

Table 2: Meningococcal Disease Incidence and Number of Cases (n)

Year	Serogroup B (Incidence)	Serogroups A, C, W, Y (Incidence)	Serogroup B (Cases)	Serogroups A, C, W, Y (Cases)
2006-07	~0.15	~0.25	82	143
2008-09	~0.18	~0.20	88	102
2010-11	~0.20	~0.15	59	84
2012-13	~0.22	~0.10	56	34
2014-15	~0.24	~0.08	45	11
2015	~0.25	~0.05	28	10
2016	~0.26	~0.05	41	18
2017	~0.25	~0.05	47	7

Long-format manuscript

Metrics and Testimonials



- #1** most URL visits of the series
- 2x** more URL visits for QR code posters
- 2x** more URL visits than previous year
- 190%** improvement over previous year's poster

“More people stopped by and asked questions than any other poster presentation I’ve done”

“...highly recommend presenting THIS poster in the future at any...meeting”

“Poster is GREAT!”

Poll Question 2

Which of these do you engage with **most frequently**?

Graphic Abstract

Plain Language Summary

PowerPoint Slide Decks

Standard Response Letters

Abstract Infographic Plain Language Summary (APLS) sample

Before

An Investigational *Clostridioides (Clostridium) difficile* Vaccine May Provide Long-Term Protection From Disease

<< Graphics: Please include the following information in the document, either as a header or below the title. >>

Date of Summary: October 2020

The full title of this abstract is: Immunogenicity, Safety, and Tolerability of a Booster Dose of *Clostridium difficile* Vaccine and 4 Year Antibody Persistence

Study Number: Clinical Trials.gov number NCT02561195

<< Graphics: Please include the following disclaimers in the document. Please also include a written out web link to the abstract. >>

Please note that this summary only contains information from the full scientific abstract: <<web link>>

- This vaccine is not approved to treat the condition under study that is discussed in this summary.
- This study was sponsored by Pfizer Inc.
- The summary reports the results of 1 study. The results of this study may be different from results of other studies that the researchers look at.
- Researchers must look at the results of many types of studies to understand whether a study vaccine works, how it works, and whether it is safe to prescribe to patients.

What do you need to know about the *C difficile* infection?

- Infection with a bacterium called *Clostridioides (Clostridium) difficile* (also known as *C difficile*) causes severe illness and diarrhea.
 - Older people and those taking antibiotics are especially at risk.
- *C difficile* infection can be difficult to treat, and there is no vaccine available.

What did this study look at?

- This study evaluated people who were given an investigational *C difficile* vaccine at various doses (amounts) and at various times (schedules) and asked:
 - <<initial *C difficile* vaccination>> Will they still be protected after 1 and 4 years? Is the vaccine safe?
 - <<*C difficile* booster vaccination>> Will they be protected? Is the booster shot* safe?
 - Include following footnote: *An extra dose of a vaccine to further enhance and extend protection

<<Graphics: could we please include a graphic describing the study design?>>

- Healthy adults aged 65–85 years
 - n=300
- Stage 1
 - Vaccinated with:
 - *C difficile* vaccine
 - 2 doses (amounts) of the vaccine were tested
 - Placebo*
 - Given as a 3-dose day (1, 8, 30 days) or month schedule (0, 1, and 6 months)
- Immune responses and safety were assessed during the first year after dose 3
- Booster stage
 - Included subjects who received the *C difficile* vaccine in stage 1, rerandomized 1:1 to receive:
 - *C difficile* vaccine as booster
 - Same dose and schedule as received in stage 1]
 - Placebo*
- Immune responses and safety were assessed 3 years after booster (4 years after stage 1 dose 3)

*A placebo does not contain any active ingredients. The placebo and study vaccines look alike.

After

An Investigational *Clostridioides (Clostridium) difficile* Vaccine May Provide Long-Term Immune Responses From 3 Shots and an Increased Immune Response From 4 Shots

The full title of this abstract is: Immunogenicity, Safety, and Tolerability of a Booster Dose of *Clostridium difficile* Vaccine and 4 Year Antibody Persistence Study Number: NCT02561195

- For more information on clinical studies in general, please visit: <https://www.clinicaltrials.gov/ct2/about/index.html>
- Writing support for this summary was provided by Srinivas Ramachandran, PhD, and Kim Rasin, PhD, at ICON plc (North Wales, PA, USA) and was funded by Pfizer.
- This study was sponsored by Pfizer.
- This study vaccine is not approved to treat the condition under study that is discussed in this summary.
- The results of this study may differ from those of other studies. Researchers should make treatment decisions based on all available evidence not on the results of a single study.

Date of Summary:



WHAT DO YOU NEED TO KNOW ABOUT THE *C DIFFICILE* INFECTION?



Infection with a bacterium called *C difficile** may cause severe illness and diarrhea.



Older people and those taking antibiotics are especially at risk.



C difficile infection can be difficult to treat, and there is no vaccine available.

**Clostridioides (Clostridium) difficile*

WHAT DID THIS STUDY LOOK AT?

This study evaluated people who were given an investigational *C difficile* vaccine at various amounts (doses) and at various times (schedules) and asked:



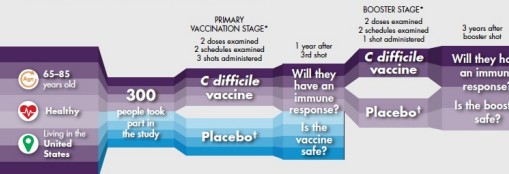
Will they still have an immune response* 1 and 4 years after initial vaccination? Is the vaccine safe?



Will they have an increased immune response 3 years after the booster shot*? Is the booster shot safe?

*A booster shot is an extra shot of a vaccine to further enhance and extend protection. The immune response is the body's reaction to defend against a foreign substance and protect from disease.

WHO TOOK PART IN THIS STUDY?



*The dose is the amount of vaccine given at one time (how much). The schedule is the timing of when the vaccine is given (when). The number of shots is how many times you need to be given the vaccine (how often). A placebo does not contain any active ingredients. The placebo and study vaccines look alike.

An Investigational *Clostridioides (Clostridium) difficile* Vaccine May Provide Long-Term Immune Responses From 3 Shots and an Increased Immune Response From 4 Shots

The full title of this abstract is: Immunogenicity, Safety, and Tolerability of a Booster Dose of *Clostridium difficile* Vaccine and 4 Year Antibody Persistence Study Number: NCT02561195

- For more information on clinical studies in general, please visit: <https://www.clinicaltrials.gov/ct2/about/index.html>
- Writing support for this summary was provided by Srinivas Ramachandran, PhD, and Kim Rasin, PhD, at ICON plc (North Wales, PA, USA) and was funded by Pfizer.
- This study was sponsored by Pfizer.
- This study vaccine is not approved to treat the condition under study that is discussed in this summary.
- The results of this study may differ from those of other studies. Researchers should make treatment decisions based on all available evidence not on the results of a single study.

Date of Summary:



WHAT DO YOU NEED TO KNOW ABOUT THE *C DIFFICILE* INFECTION?



Infection with a bacterium called *C difficile** may cause severe illness and diarrhea.



Older people and those taking antibiotics are especially at risk.



C difficile infection can be difficult to treat, and there is no vaccine available.

**Clostridioides (Clostridium) difficile*

WHAT DID THIS STUDY LOOK AT?

This study evaluated people who were given an investigational *C difficile* vaccine at various amounts (doses) and at various times (schedules) and asked:



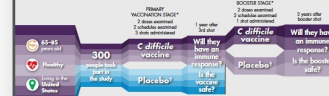
Will they still have an immune response* 1 and 4 years after initial vaccination? Is the vaccine safe?



Will they have an increased immune response 3 years after the booster shot*? Is the booster shot safe?

*A booster shot is an extra shot of a vaccine to further enhance and extend protection. The immune response is the body's reaction to defend against a foreign substance and protect from disease.

WHO TOOK PART IN THIS STUDY?



*The dose is the amount of vaccine given at one time (how much). The schedule is the timing of when the vaccine is given (when). The number of shots is how many times you need to be given the vaccine (how often). A placebo does not contain any active ingredients. The placebo and study vaccines look alike.

WHAT DID THIS STUDY FIND?

How long will people have an immune response after getting the *C difficile* vaccine?



Will people have an immune response after getting the *C difficile* vaccine booster shot?



Is the vaccine safe?



WHAT ARE THE MAIN CONCLUSIONS OF THIS STUDY?

This investigational *C difficile* vaccine maintained an immune response up to 4 years after initial vaccination. A booster shot did not cause any medical issues and increased the immune response against disease.

WHO SPONSORED THIS WORK?

Pfizer Inc.
300 Avenue Q
Collegeville, PA 19426
USA
Pfizer would like to thank all of the people who took part in the study.

Graphic Abstract

Before

Palbociclib Plus Letrozole for Women with HR+/HER2- ABC in Australia and India

OBJECTIVE

To provide access to palbociclib for patients with HR+/HER2- ABC in Australia and India before commercially availability

STUDY POPULATION

- Key inclusion criteria included:
 - Postmenopausal women aged ≥ 18 years with HR+/HER2- ABC
 - Eastern Cooperative Oncology Group (ECOG) performance status score of 0-2
 - Deemed appropriate candidates for letrozole therapy
- A total of 252 patients received palbociclib plus letrozole (Australia, n=152; India, n=100).

SAFETY ASSESSMENTS

- The most frequently reported all-grade palbociclib-related TEAEs were neutropenia (66.7%), fatigue (35.3%), and stomatitis (26.6%).
 - Grade 3/4 neutropenia, fatigue, and stomatitis were reported in 62.7%, <1%, and <1%.
- Six patients (2.4%) had febrile neutropenia.
- Approximately 3.2% of patients discontinued due to an adverse event.

RESPONSE RATE [perhaps a vertical bar chart?]

- The observed objective response rate was 19.4% (95% CI, 14.7-24.9) for the total population.
- Australian patients with ≥ 2 lines of prior therapy for metastatic disease (n=43) had an observed OR rate of 2.3%.

PATIENT REPORTED OUTCOMES

- Patient-reported quality of life scores were maintained throughout the study.

CONCLUSION

- In an expanded access setting in Australia and India, palbociclib plus letrozole was generally well tolerated in patients with HR+/HER2- ABC.

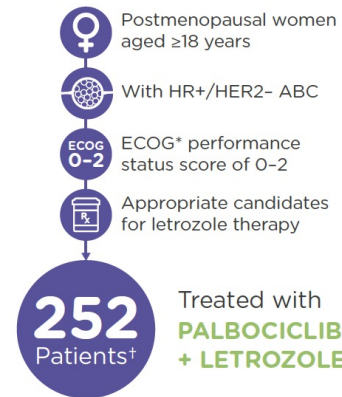
After

Palbociclib Plus Letrozole for Women with HR+/HER2- ABC in Australia and India

Objective

To provide access to palbociclib for patients with HR+/HER2- ABC in Australia and India before commercial availability

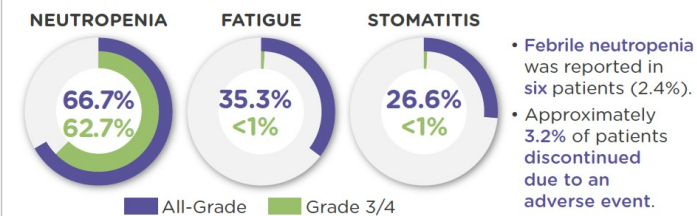
Study Population



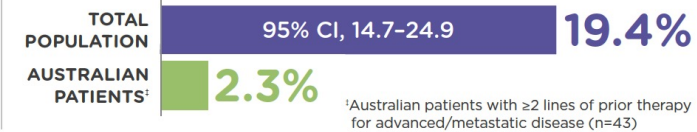
*Eastern Cooperative Oncology Group
[†]Australia, n=152; India, n=100

Safety Assessments

The most frequently reported all-grade palbociclib-related TEAEs:



Objective Response Rates



Patient Reported Outcomes

Patient-reported quality of life scores were maintained throughout the study.

Conclusion

In an expanded access setting in Australia and India, palbociclib plus letrozole was generally well tolerated in patients with HR+/HER2- ABC.

This process is
scalable to

- ✓ Budget
- ✓ Level of complexity
- ✓ Diverse formats
- ✓ Audience members
- ✓ Size of your team

Optimizing Enhanced Visuals in the Medical Affairs Environment

Maya Shehayeb, PharmD

The views expressed in this Webinar are those of the presenter, and are not an official position statement nor do they necessarily represent the views of Amgen, Inc.

Poll Question 3

What is your biggest **challenge** in using enhanced visualization?

Compliance/Legal

Budget

Perceived as promotional

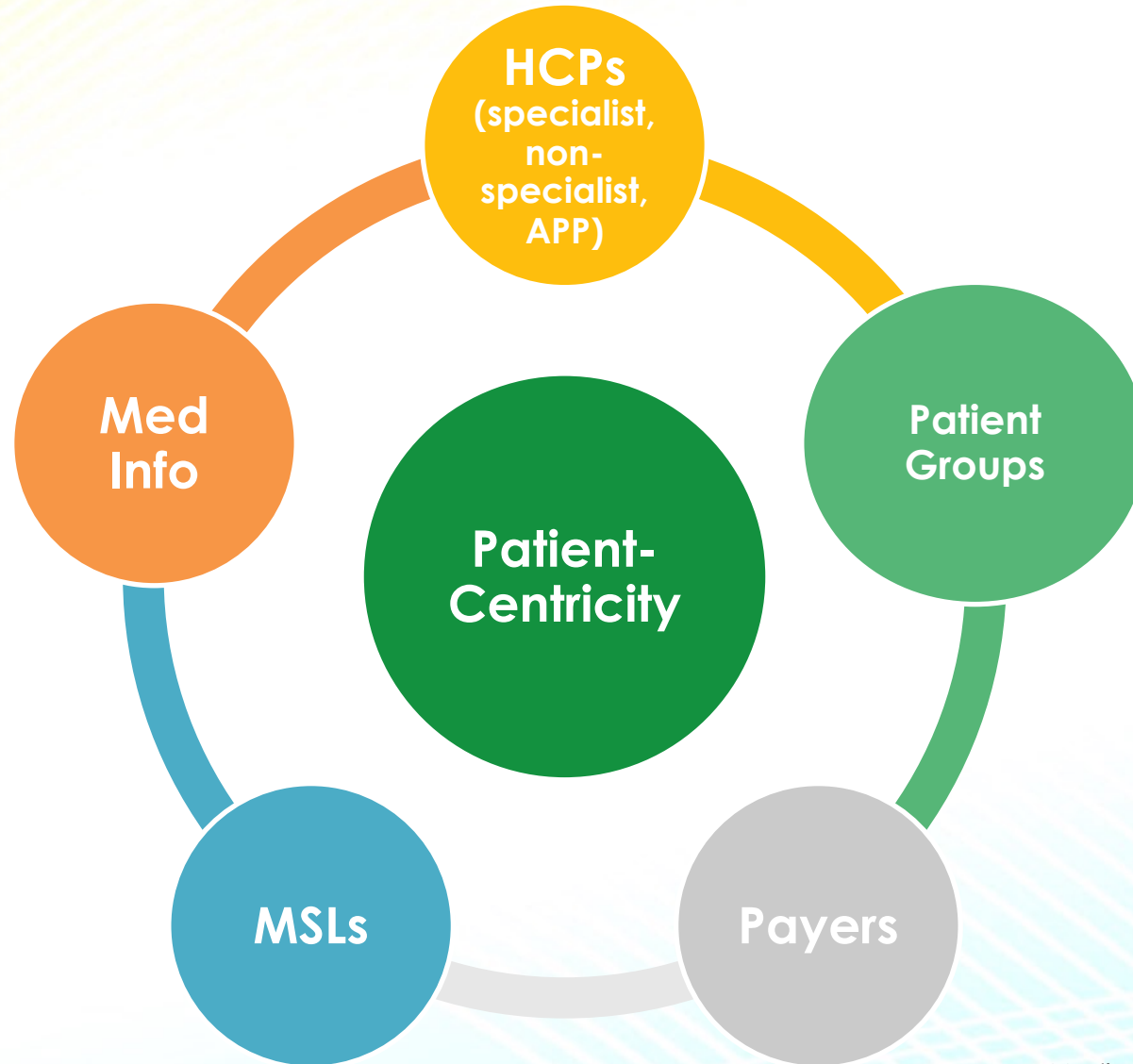
“Cherry-picking” data

Optimizing Enhanced Visuals in the Medical Affairs Environment

The growth and adoption of enhanced content have:

- Provided new tools and options to better communicate data and research,
- Allowed for increased reach, easier access, and a variety of new formats in which to present data compared with traditional printed media

Enhanced Visuals Facilitate Engagement with a Variety of Medical Affairs Audiences



Medical Affairs Guides the Data Communications Journey From Discovery through Engagement

Medical Affairs provides oversight and strategic guidance for education, engagement, training, and related activities and tools

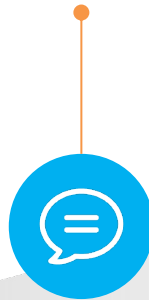
Evidence Generation



Communication Objectives



Scientific Statements/
Lexicon



Congress Activities



Manuscripts



MSL
Education
& Training



SRLs,
Med Info,
Investor Relations



RWE,
HEOR,
Patient Engagement

Overcoming Implementation Barriers

Barriers/Concerns

Implementation Strategy

Crisp look and feel to data presentation (“too commercial”)



Infographics communicate key data points clearly and concisely. This may be particularly valuable to broader audiences and time-poor clinicians.

Oversimplified, cherry-picked data, lack of fair balance of safety and efficacy



Do not overinterpret data, make factual statements, ensure key overall conclusions of enhanced visual align with original publication/dataset

Budget – often not available for an additional version of the original deliverable



Proactive planning may help mitigate budget constraints. Enhanced visuals can also be the de novo deliverable vs an update of a non-infographic original



Discussion/Q&A/Summing Up

Moderator: Paul Petruzzi, DLitt