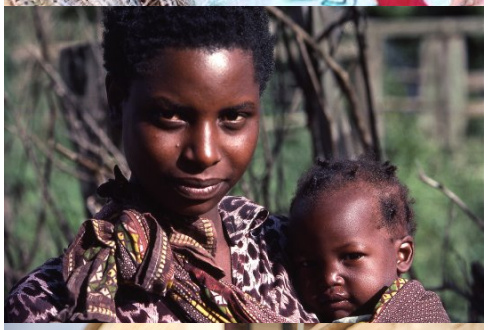

Multipurpose Prevention Technologies

for Sexual & Reproductive Health

MPTs Available Now and in the Future

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Wayne C. Shields, ARHP President & CEO

Association of Reproductive Health Professionals

Session Objectives

This session is designed to help you do the following

- Define multipurpose prevention technologies
- Describe existing MPTs in use globally
- Describe the range of MPT delivery systems in development
- Describe the challenges and timeline for MPTs development

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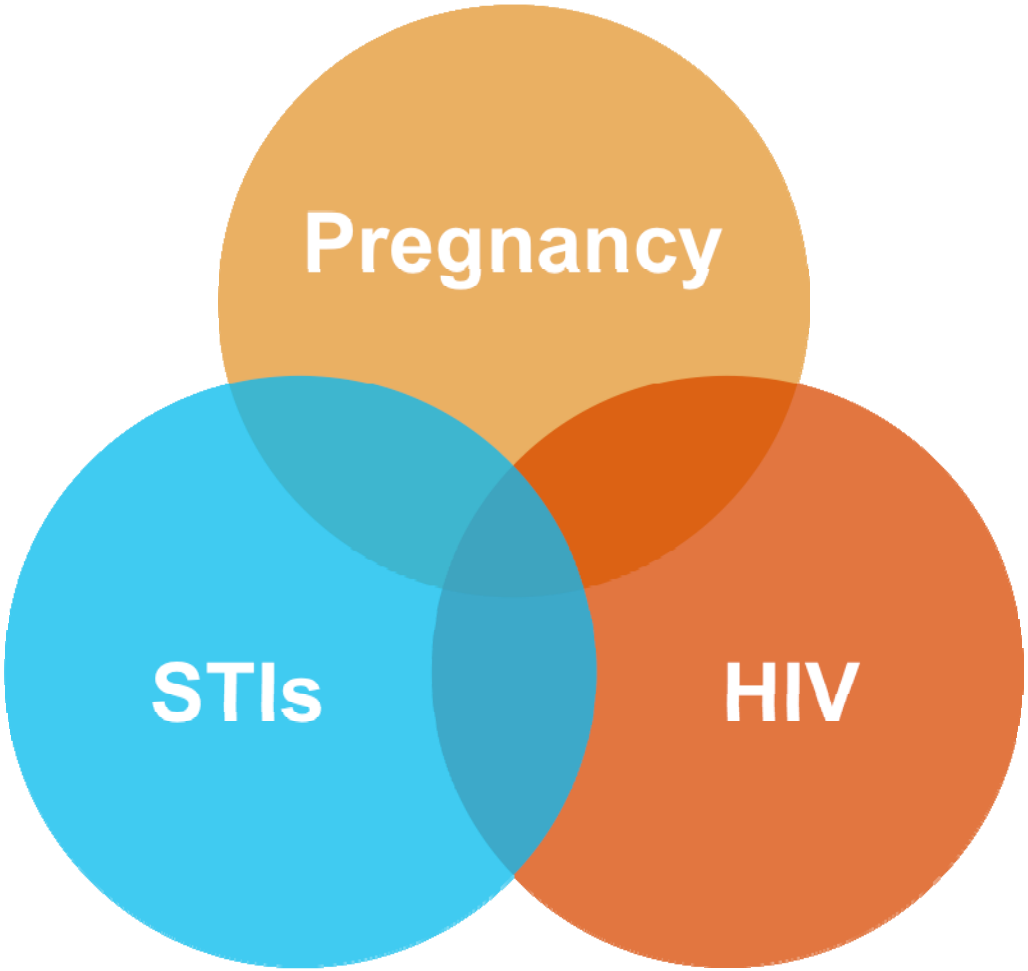
Multipurpose Prevention Technologies



- **Prevent** at least 2 of the following: unintended pregnancy, HIV/AIDS, STIs
- Ensure women's **privacy & autonomy**
- Are **safe & easily available**
- Are **designed by women** for their specific needs & preferences

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Global need, regional priorities

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MPTs: Historical Precedents

H_2O + flouride	The pill + iron	Grains + folic acid

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Currently Available MPTs

Female Condom | Male Condom

Advantage: Available now

Disadvantages: Use rates are low, can be difficult to negotiate

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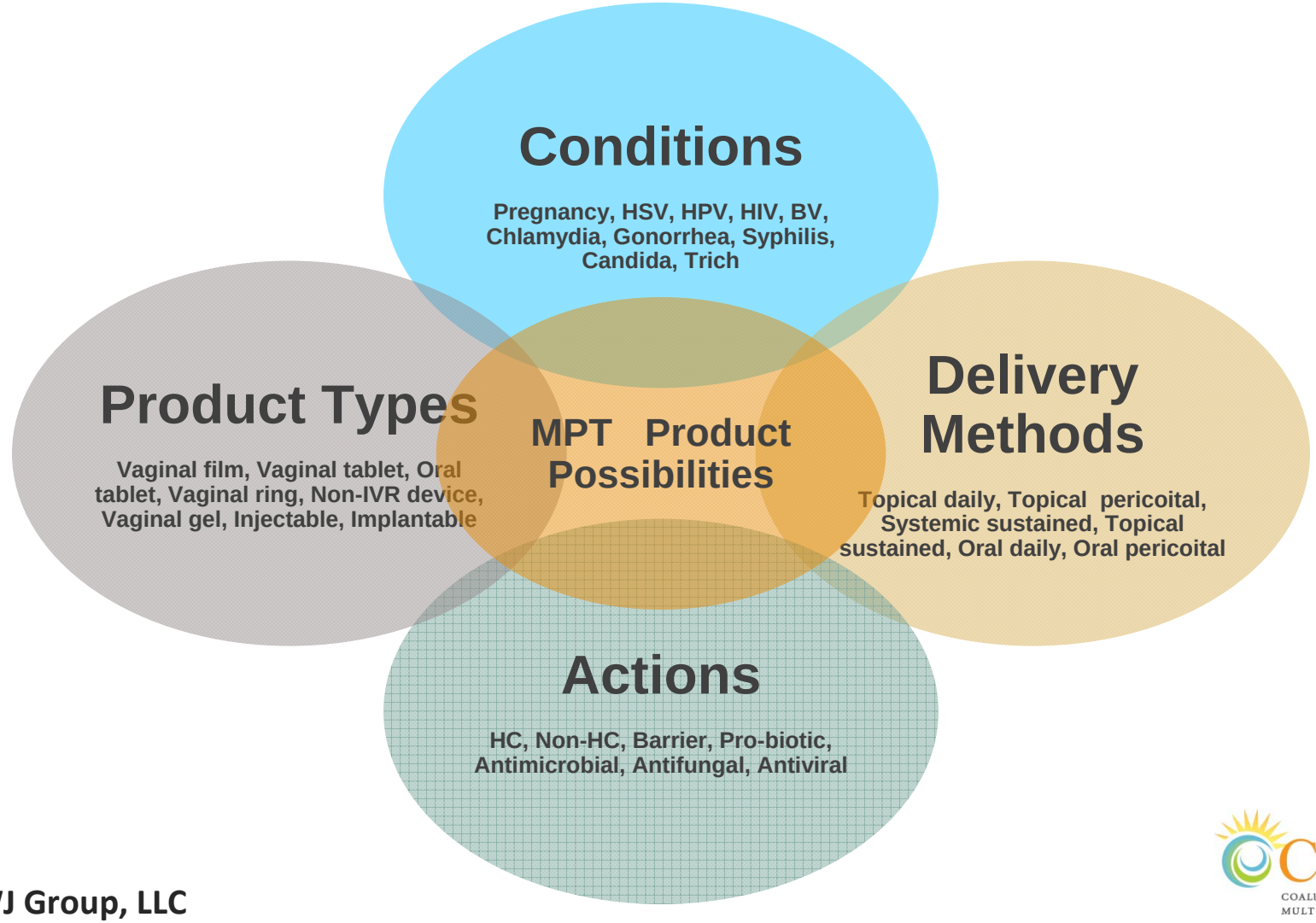
Complex Factors = Many Possibilities



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Potential MPT Delivery Methods

Devices	Vaginal Rings	Vaginal Tablets	Vaginal Films

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MPTs in the Pipeline

Drug combinations	Drug/device combinations	Multipurpose vaccines	Bacterial therapeutics	Nanoparticles

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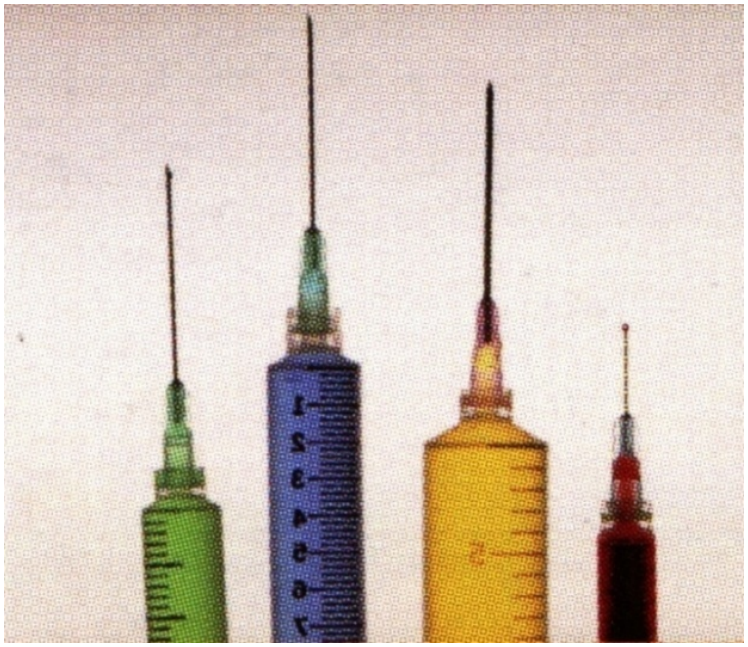
Single & Multipurpose Vaccines

- Today: Single purpose vaccines (HPV & HBV)
- 20 years: Multivalent vaccines (HSV, HIV, Gonorrhea, Chlamydia, Trichomonas, other STIs)
- Contraceptive vaccines not likely



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MPT Product Profile: Working Group Recommendations

MPT PRODUCTS

HIV/STI Prevention

Contraception

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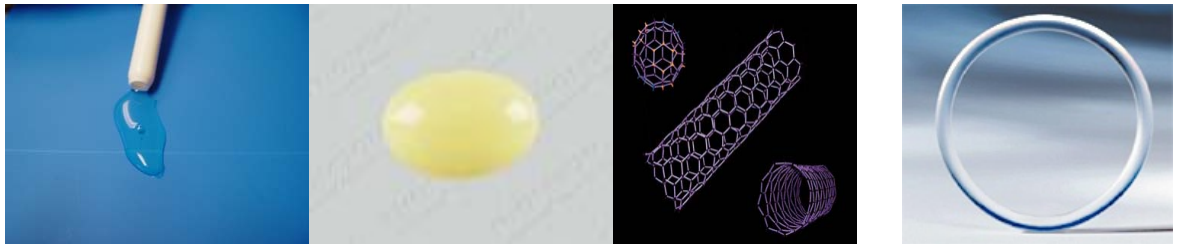
Priorities for 1st Generation MPTs

"On demand"	Sustained release



- Used around time of intercourse
- For women who have intermittent sex or want more direct control over their protection

- User-initiated, does not require daily action
- Should increase adherence and effectiveness

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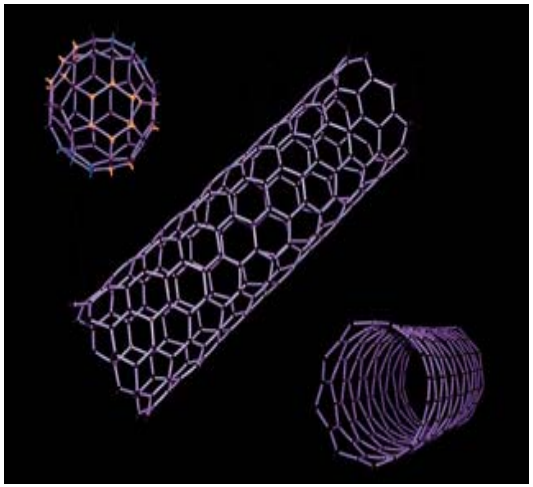
On-Demand Products: Gels, NFDs

Tenofovir Gel (CONRAD)

- 1st proof-of-concept vaginal microbicide
- Coitally-dependent
- Confirmation trial underway for 2014

MZL Combo NFD (Pop Council)



- MIV-150 + Zinc Acetate + LNG in NFD
- Prevents pregnancy, HIV, HSV-2, HPV
- Up to 24-hrs protection

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On-Demand Products: Devices + Active Agents

SILCS (PATH, CONRAD, NICHD)	+ TFV Gel (CONRAD)

- "One size fits most" silicone diaphragm
- Intended for OTC pregnancy prevention
- 5-yr shelf life, re-use up to 3 yrs

- SILCS barrier = delivery device
- Non-hormonal MPT protection: pregnancy, HIV, HSV2 up to 24 hrs

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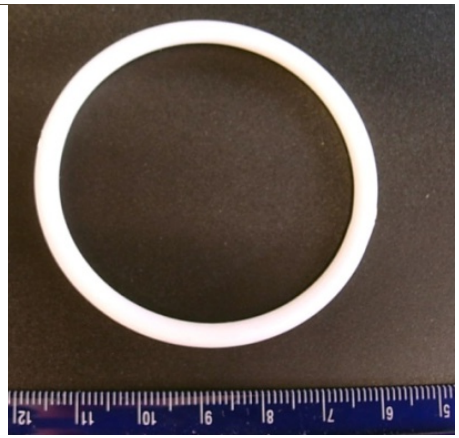
Sustained Release Devices: Combination Intravaginal Rings

30-day MZL Combo (Pop Council)	60-day Dapivirine + LNG (IPM)	90-day TFV + LNG (CONRAD)
		
■ MIV-150 + Zinc Acetate + LNG ■ Demonstrated single-API success ■ Pregnancy, HIV, HSV2	■ DPV + LNG ■ Testing underway, clinical studies 2013 ■ Pregnancy, HIV	■ TFV + LNG ■ Testing underway, clinical studies 2013 ■ HIV, HSV2

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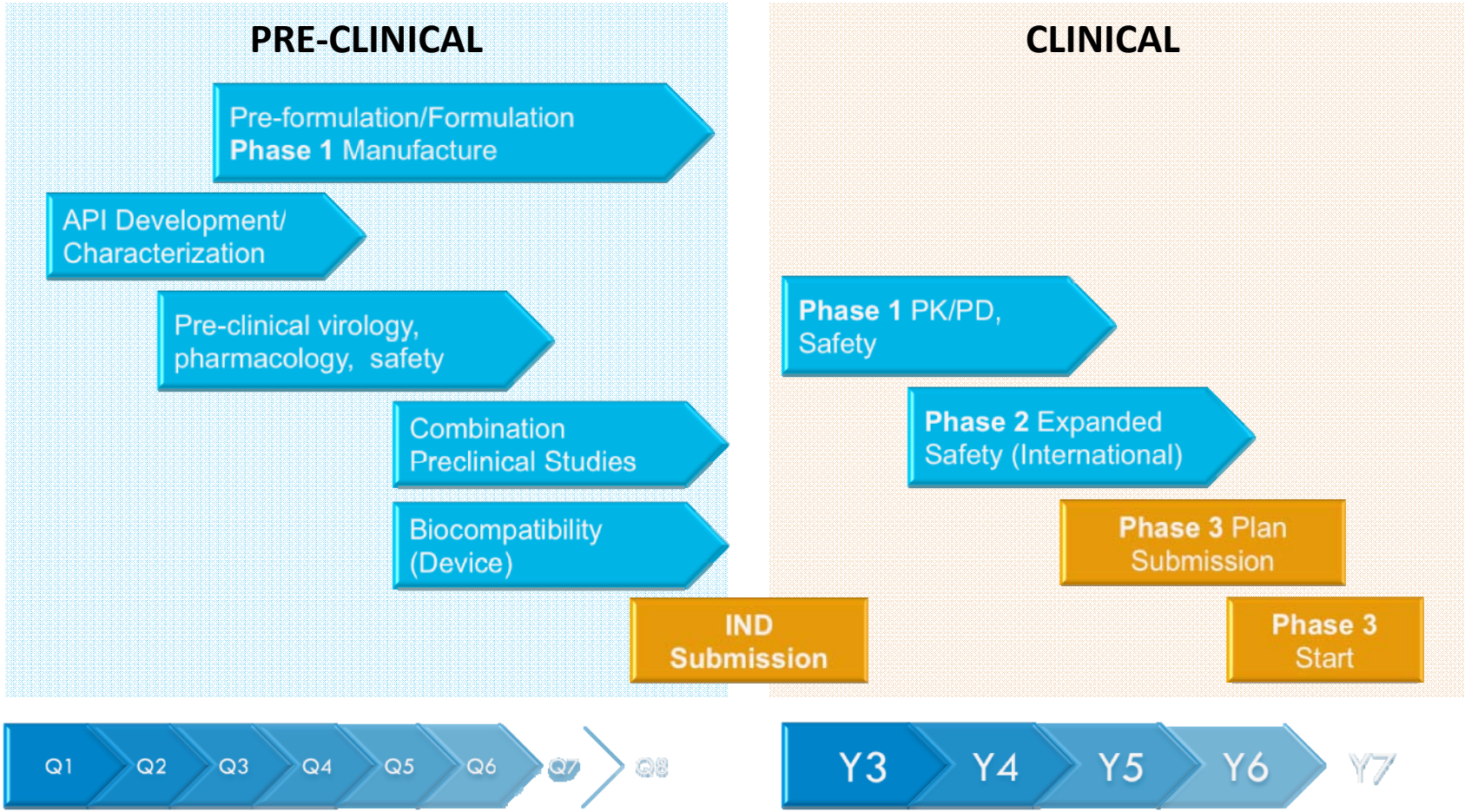
MPT Product Development Timeline



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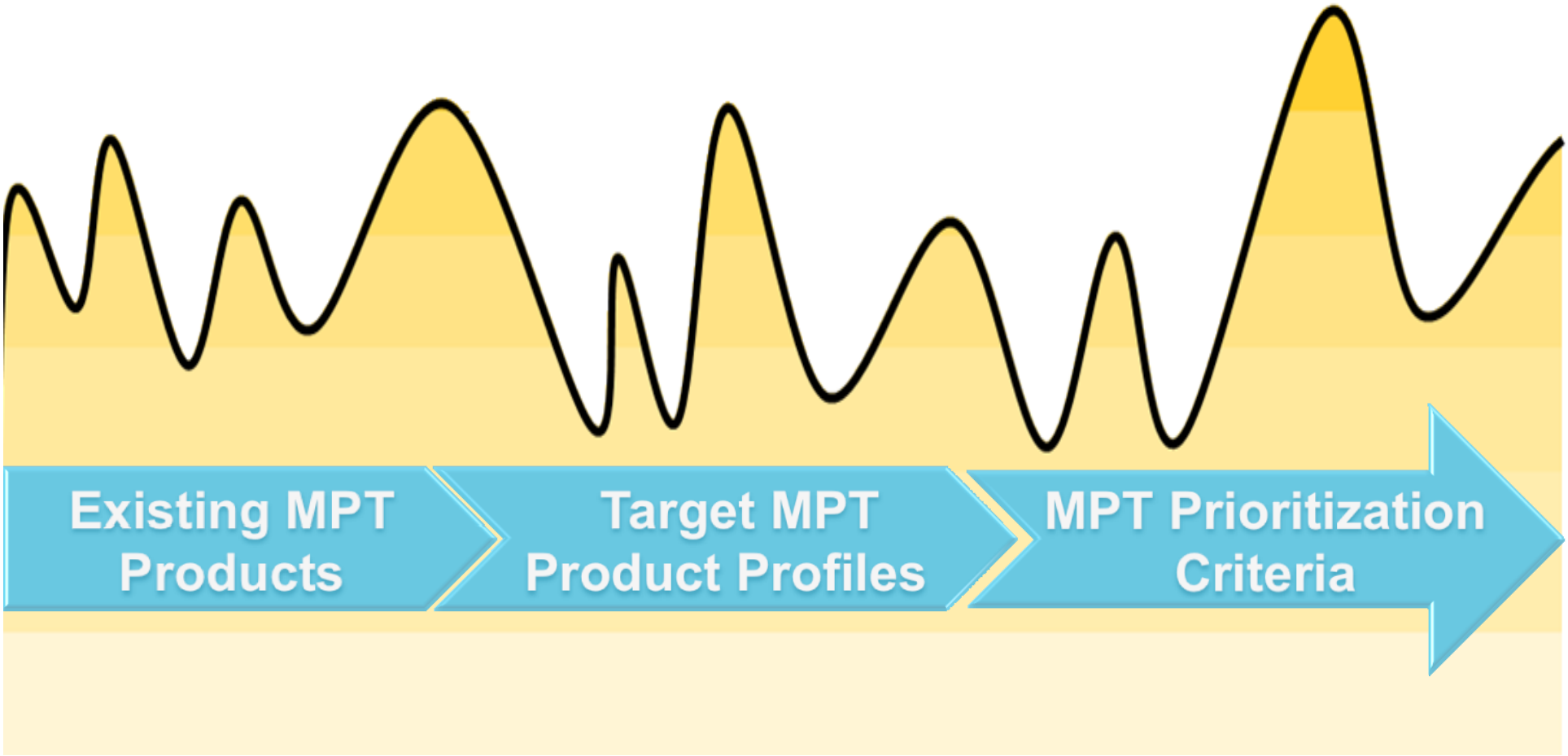
MPTs roadmap is not linear



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The Initiative for
Multipurpose Prevention Technologies

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Barriers to progress on MPTs

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The time for MPTs is now

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- **US Agency for International Development**
- **Wellcome Trust**

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Questions?