# The PATH Center of Excellence for Microarray Patch Technology



Advancing the microarray patch delivery technology platform for high-priority global health needs

PATH's Center of Excellence (CoE) for Microarray Patch (MAP) Technology is a four-year initiative to mobilize efforts to accelerate the development of MAPs for critical vaccines and essential medicines. Together with a community of more than 30 MAP developers, industry experts, and global health stakeholders, the MAP CoE aims to forge a future for MAPs that maximizes the potential of this innovative delivery technology platform.

## Strategic solutions

Microarray patch technology has the potential to foster untold gains in access, efficacy, and adherence for vaccines and essential medicines. However, pioneering MAP technology for use in low-resource settings is challenged by unknown market potential, manufacturing hurdles, and undefined regulatory pathways. In response the MAP CoE is generating information and resources that will broadly support the MAP technology field. We will provide complementary support for lead products that are already the focus of coordinated product development and formative support for early-stage, high-impact candidates.

## **Broad MAP platform support**

Our key activities:

- Defining the regulatory pathway for MAP technologies.
- Exploring scalable manufacturing approaches.
- Conducting human factors engineering and usability analyses.
- Assessing user and health program needs in low-resource settings to guide product development.

#### Identifying high-potential MAP applications

Informed by years of deep research in this field, broad stakeholder feedback, and our Scientific Advisory Group, the MAP CoE evaluated numerous potential MAP applications across key indicators—such as potential health impact, potential commercial viability, and probability of technical



Example of a microarray patch from Micron Biomedical.

and regulatory success—to prioritize the following MAP applications:

- Measles-rubella vaccine
- Hepatitis B birth dose for infants
- Rabies vaccine
- HPV vaccine
- Hormonal contraception
- Long-acting antiretrovirals for HIV

#### **Engagement and dissemination**

We are engaging with the MAP community through MAP CoE events, workshops, and conference presentations as well as disseminating information via our e-newsletter, white papers, and publications. For more details or to find technical resources related to MAP development, see our Microarray Patch web resource, www.path.org/programs/mdht/mapresources.

Please join the discussion and help realize the future of MAPs with the PATH Center of Excellence for Microarray Patch Technology.



