



## Meet&Match.Dx 2023



### Challenge 1:

**Title:** Integration of a cuffless blood pressure monitoring technology into the Beurer product portfolio

Challenge-owner: Beurer

Disease area (optional): Cardiovascular disease

#### **Description of the challenge:**

1. Short introduction about the disease, the problem, or the process related to your challenge and desired solution.

The heart is known as the motor of the human organism. With an impaired heart, the quality of life and joy of living diminishes - therefore we should pay attention to its health. Nevertheless, cardiovascular diseases are the most common cause of illness and death in western industrialized countries. Hypertension has been described as "the leading global risk for mortality in the world", as it causes many organs and vessels to be permanently exposed to increased stress usually without noticeable symptoms. Today, it continues to affect between 30 and 45% of the European population. Hypertension is a rather hidden condition and thereof not on top of mind in everyday life but if high blood pressure remains undetected, it can lead to serious permanent damage in the long term.

#### 2. Describe the current treatment/solution (if any) and its limitations.

There are different ways of dealing with hypertension across relevant target groups. Self-monitoring of blood pressure by patients at home (home blood pressure monitoring (HBPM)) is being increasingly used in many countries and is well accepted by hypertensive patients. Current hypertension guidelines have endorsed the use of HBPM in clinical practice as a useful adjunct





to conventional office measurements. Currently available non-invasive automatic blood pressure monitors have several pain points. One of them is inusability, which make the usage uncomfortable and leaves room for product and technology-vise improvements. For example, the cuff leaves an uncomfortable feeling (or even pain) during measurement when the device inflates because of compression of upper arm. Furthermore, it is often difficult and complicated to be put on. The procedure generates discomfort and limits patient compliance.

Next to the classic blood pressure monitors, there are already first technical implementations available in the market but all of them have limitations in its clinical evidence and the lack of medical product approval. As such, patient acceptance is lower due to inaccurate measurements which leads to little recognition by medical professionals and health sector.

#### 3. Describe which kind of solution you are looking for.

We are looking for a solution to solve the above-mentioned pain points with a potential clinical validated cuffless blood pressure monitoring method with the aim to launch product in the consumer segment as well as access new, untapped market potential. Furthermore, the solution could potentially be monitoring other vital parameters.

#### 4. Write a more detailed description of the ideal solution.

Beurer is looking for an alternative to blood pressure cuff measurement. The ideal solution is a cuffless device/technology which captures blood pressure readings without performing any arterial occlusion. Ideally, the solution will be designed for self-measurement by adults in a domestic environment and will be easy to use by "every" potential user, as early start of patient journey needs a low barrier of use. Furthermore, the solution needs to be easy to operate anytime and anywhere.

The solution should include the following features:

- Approval/certification sought: CE certification / MDR, FDA, potential for other country specific listings.
- Measurement accuracy:
  - To finally run through approval process, it is mandatory to provide lab test equivalent results. If not possible at current stage of development all other internal tests done are acceptable. If not possible at current stage of development, first draft of protocol for clinical evaluation is acceptable.
- Aim to launch product with medical grade within 2024.
- Possibility of integration: Because connectivity of devices and high usage of smartphone apps, it is required for all technologies to have the possibility of integration into already existing app or using separate application for this.

#### 5. Target group: End users / Home consumers.

The blood pressure measurement should be suitable for adult users, even those who are not diagnosed with hypertension. Furthermore, the solution can be aimed at consumers who are looking to track vital health parameters, and for health-conscious users.





# How to apply for Meet&Match.Dx Programme?

- Check your eligibility:
  - Does your company meets the <u>SME definition</u> of the EU (more details via <u>SME self-assessment)?</u>
  - o Did your SME receive more than a total of €200.000 of de Minimis state aid between 2020 and 2022? For more information about de-minimis aid. You can find helpful information via these links <u>de minimis rule</u> and <u>state aid</u>.
- Before you apply, read the full Meet & Match.Dx programme description
- Submit your application via the <u>application portal</u> until 16 April 2023, 23:59 CET.