



## Manual vacuum aspiration

### Description

Manual vacuum aspiration (MVA) can be used to manage a number of maternal health conditions—such as incomplete and spontaneous abortion or unsuccessful medical abortion—and can be used to perform first trimester induced abortions and endometrial biopsies. MVA allows for evacuation of the uterus using a hand-held plastic aspirator attached to a cannula (a thin tube). MVA and electric vacuum aspiration (EVA) share a common mechanism of action—using suction as the force to remove uterine contents via the cannula. Unlike electric suction, the suction used for uterine evacuation with MVA is created manually by extending the plunger of the syringe-like aspirator. For EVA, a large electric machine generates the suction, and the aspiration is performed using a long tube connected to the EVA machine. The need for electricity, the large size, and the cost of the machine precludes the use of EVA in many parts of the world, whereas MVA can be used in any location where basic medical care is provided.

MVA is safe, effective, easy to use, portable, and reusable. It is appropriate for use in many different clinical settings (including developing country outpatient centers), does not require lengthy training for proper operation, and has yielded both high patient and provider satisfaction.<sup>1,2</sup> Additionally, there is substantial evidence that mid-level providers—for example, midwives, clinical officers, nurse practitioners, physician assistants—can perform MVA procedures safely and effectively in a range of health care settings.<sup>3,4,5,6</sup>

### Efficacy

MVA has been demonstrated to be effective and very safe through clinical studies over the last 30 years. The World Health Organization (WHO) recommends MVA as a preferred method of uterine evacuation.<sup>2</sup> When compared to sharp curettage (also known as dilation and curettage or D&C), MVA is a safer, more readily accessible, and potentially less expensive way to offer high-quality services to women.<sup>7</sup>

Studies demonstrate that the efficacy of MVA is comparable to EVA and is successful in approximately 99 percent of cases for early elective abortion and management of early pregnancy loss. Studies show that 98 percent of vacuum aspiration procedures occur without complications, much higher than the alternative D&C method, which may induce incidences of excessive blood loss, pelvic infection, cervical injury, and uterine perforation.<sup>8</sup>

### Current program/sector use

Vacuum aspiration, both electric and manual, is used for about 97 percent of first-trimester surgical induced abortions in the United States. Canada, China, New Zealand, Singapore, the United Kingdom, and other countries use vacuum aspiration for most of their first-trimester surgical-induced abortions.<sup>9</sup> In many developing countries, such as Bangladesh and Vietnam, MVA has been used for several decades to provide early induced abortion, including procedures referred to as “menstrual regulation.” MVA is well suited for use in conjunction with medical abortion\* if there is a concern that the uterus has not been completely evacuated.

### Manufacturer/supplier

MVA is available in many countries. Many governments have identified MVA in clinical guidelines as the preferred method for uterine evacuation. Inclusion in clinical guidelines also helps to ensure adequate and reliable supplies of MVA instruments in their public health systems.

The original MVA device was developed by Ipas—an international organization that works to increase women’s ability to exercise their sexual and reproductive rights, and to reduce abortion-related deaths and injuries. WomanCare Global (WCG) is the exclusive distributor of Ipas MVA instruments (single- and double-valve aspirators and cannulae), which are CE marked and manufactured in Taiwan. WCG adheres to ISO 13485 quality standards, audits their manufacturers, and has conducted verification testing

\* For more information on medical abortion, please see the Caucus’ brief on mifepristone and misoprostol for medical abortion.

for compliance. WCG provides access to reproductive health products in both the public and private sectors in more than 100 countries.

Marie Stopes International (MSI) has manufacturers in China, Malaysia, and Taiwan who manufacture both single- and double-valve MVA. Both possess the CE mark. MSI is a global nonprofit organization providing the full spectrum of reproductive health care in both developing and developed countries.

Currently, there are a number of other MVA products available from other manufacturers, but quality can be variable. Some efforts have been made to assess and document their relative quality.<sup>10</sup>

### Registration status

Ipas MVA products (aspirators and cannulae) are CE marked and are registered by WCG in countries throughout the world as accepted clinical procedures and approved medical devices.

Currently, MSI's MVA products are mainly used in MSI clinics, but they are available to external procurers. The CE marking on MSI's MVA products is sufficient for the countries where it operates so individual country registrations are not required.

### Public-sector price agreements

There are no known public-sector pricing agreements at this time.

Procurers are encouraged to contact WomanCare Global (customerservice@womancareglobal.org) for Ipas MVA instruments or Marie Stopes International (orders@mariestopes.org) for MSI MVA instruments.

### References

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