Researchers at University of Southern California (USC) Fertility at Keck Medicine of USC have determined that modified natural cycle in-vitro fertilization (IVF) is a more cost-effective fertility method than controlled ovarian stimulation and traditional IVF. Depending on the treatment strategy, modified natural cycle IVF could save up to $7,000 over conventional IVF for each live birth. This provides hope to women and couples who would normally be deterred by the high up-front costs of the more widely used treatments. The findings were presented today at the American Society for Reproductive Medicine 2016 Scientific Congress.

"We know that of the one in six couples who will experience difficulties getting pregnant, a significant portion of them will not be able to afford the treatments that could help them conceive," said Richard Paulson, MD, director of USC Fertility and senior author of the study. Paulson is one of the preeminent fertility physicians in the world to use modified natural cycle IVF. "Modified natural cycle lowers the barrier of entry for these couples and affords them the opportunity to grow their families."

The study analyzed six IVF treatment strategies against six similar modified natural cycle IVF strategies for infertile patients under 35 years of age with good prognosis. Some of these strategies included a frozen embryo transfer, though the likelihood of an embryo being available using IVF was 90 percent, as opposed to 30 percent after modified natural cycle IVF. The costs were then assessed against the number of live births that resulted from each plan to create a cost-
effectiveness ratio.

The cost savings of modified natural cycle IVF were significant. One round of modified natural cycle IVF represented a cost savings of more than $7,000 for each live birth over IVF. The most cost effective strategy was two cycles of modified natural cycle with two possible frozen embryo transfers, which cost $6,500 less than a similar strategy using IVF.

Modified natural cycle IVF involves giving the prospective mother three to four days of medication to block spontaneous ovulation, as well as low-dose hormones. This method takes less time than conventional IVF, which can take up to four to six weeks for one cycle. Moreover, modified natural cycle is gentler on the body, which lowers the chance of complications over the course of treatment. Because it is a less aggressive method, it is most effective in women under the age of 35.

"Young couples experiencing fertility issues may have fewer financial resources and lower access to care, but can still achieve great success with modified natural cycle IVF," said Wael Salem, MD, a postdoctoral fellow at Keck Medicine of USC and first author of the study. "Our hope is that with this research, fertility centers will price this treatment even more competitively, providing a service to younger patients while maintaining positive outcomes."

Provided by University of Southern California
