

# A Tangible Decision Aid to Support Patient-Centered Contraceptive Counseling among Adolescents and Young Adults

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## INTRODUCTION

Adolescents and young adults (AYA) who experience patient-centered care are more likely to speak with their provider about their contraceptive concerns and select and maintain a contraceptive method—yet most do not receive such care. The objective of this study was to develop and evaluate the *Tangible Tool*, a decision aid to support patient-centered contraceptive counseling among AYA.

Adolescents designing contraceptive design aids



## METHODS

The *Tangible Tool* is a contraceptive counseling decision aid that allows patients to see and feel life-size “tangible” models of the range of contraceptive methods. The Tool was developed by a team of designers, adolescents, clinicians, and researchers using principles of human-centered design.

From December 2019 to March 2020, we conducted a pilot study to evaluate the usability, feasibility, and acceptability of the *Tangible Tool* with ten contraceptive care providers and 40 AYA patients at two Chicago clinics. We calculated descriptive statistics for patient survey data, and qualitatively analyzed provider interview transcripts for salient themes using recursive abstraction.

First Tangible Tool Prototype



Current Tangible Tool Prototype



## RESULTS

The median age for AYA was 19. AYA had positive reactions to the Tool, reporting that it allowed them to better understand how contraceptive methods work in their body and that it allowed them to make more informed decisions. They also appreciated the physical representation of each method and the medically-accurate sizes (*Table*).

Clinicians providers commented that the Tool facilitated conversations with their patients, helped dispel myths about particular methods, and eased patients’ anxieties. Clinicians also highlighted the ease of integration of the Tangible Tool into clinical care and commented on the potential for scalability across clinical settings. Limitations mentioned included storage and portability concerns, and time constraints for counseling.

*“The visual aid really kind of helps with anxiety and the unknown of what things may look like, before you agree to get it done in the setting. Oftentimes we may have small visual aids and things in a set clinical setting, but just having everything at once, in hand, really in my opinion helps with individuals deciding.”* (family nurse practitioner)

Adolescent patient perspectives on the Tangible Tool and contraceptive uptake Pilot Study, 2019-20

Positive aspects about the Tangible Tool	Total N=40
Can see what the actual methods look like (e.g., size)	37 (92.5%)
Can see the range of available methods at once	31 (77.5%)
Can learn about methods not originally considering	28 (70.0%)
Provider can show how a method works (e.g., insertion)	27 (67.5%)
Can touch the models of the various methods	26 (65.0%)
Better understand how a methods work	22 (55.0%)
Tool helpful for young people to discuss contraception with their provider, mean score	2.91 (1-3)
Left visit with a contraceptive method?	31 (77.5%)
If yes, which contraceptive method(s)?	
Oral contraceptive, vaginal ring, patch, or injection/shot	24 (77.4%)
IUD or Contraceptive Implant	8 (25.8%)
Condom	7 (22.6%)

## LIMITATIONS

- Our sample is comprised primarily of older AYA, limiting the generalizability to younger adolescents.
- We did not have a control arm and cannot infer the independent effects of the Tool on counseling experiences.
- We did not collect qualitative data from AYA, which may have elicited more information on patient-centered contraceptive care and potential improvements.

## CONCLUSION

The Tangible Tool is a useful, feasible, and acceptable decision aid that can support the provision of patient-centered contraceptive care for AYA.