

# Desirable Attributes of Healthcare Professionals: An Interprofessional Education Session Between Pharmacy and Medical Students



Stephanie J. Phelps, PharmD, Chasity M. Shelton, PharmD,  
and Trevor Sweatman, PhD  
Colleges of Pharmacy and Medicine  
The University of Tennessee Health Science Center  
Memphis, Tennessee

# OBJECTIVES

---

Define and articulate the roles of a pharmacist and physician in health care

*(Interprofessional Collaborative Practice Competency Domain 2)*

---

Communicate one's **roles and responsibilities** clearly to patients, families, and other professionals.

*(Interprofessional Collaborative Practice Competency Domain 3)*

---

Explain the roles and responsibilities of other care providers and how the **team works** together to provide care.

*(Interprofessional Collaborative Practice Competency Domain 2)*

---

Engage other health professionals—appropriate to the specific care situation—in shared patient-centered problem-solving.

*(Interprofessional Collaborative Practice Competency Domain 4)*

---

# Detail-oriented



# The Good Pharmacist

Characteristics, Virtues, and Habits

Foreword by John A. Gans

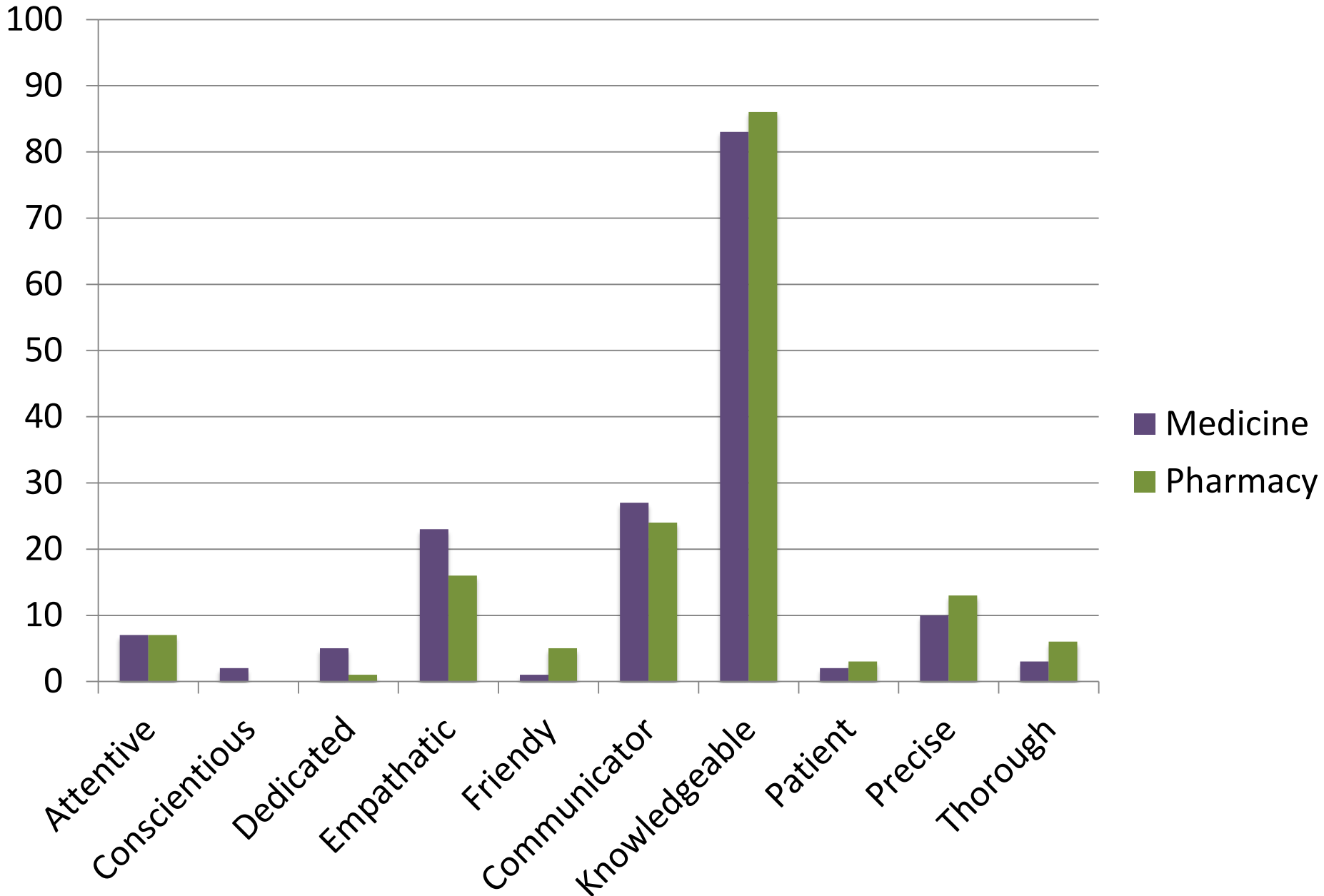
William N. Kelly and Elliott M. Sogol

Provides characteristics, virtues, and habits of a “Good Pharmacist” from the perspective of physicians, nurses, patients and other pharmacists.

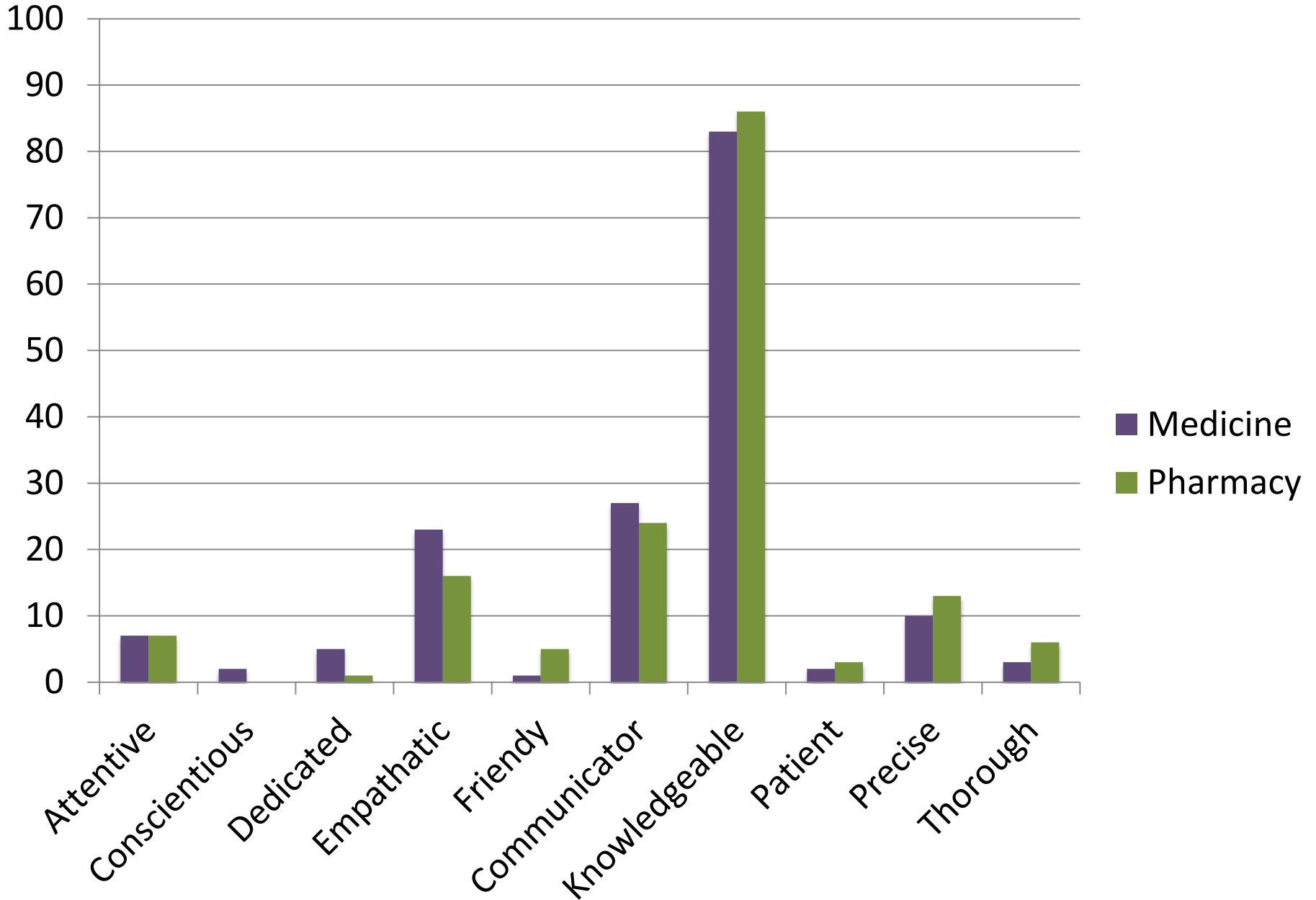
# Survey of Desirable Attributes

2014 , 2015	2016	2017
Attentive		
Conscientious	<b>Conscientious</b>	<b>Conscientious</b>
Dedicated		
Empathetic	<b>Empathetic</b>	<b>Caring or Empathetic</b>
Friendly	<b>Friendly</b>	<b>Friendly</b>
Communicator	<b>Communicator</b>	<b>Communicator</b>
Knowledgeable	<b>Knowledgeable</b>	<b>Knowledgeable</b>
Patient	<b>Patient</b>	<b>Patient</b>
Precise	<b>Precise</b>	<b>Precise</b>
Thorough		
	Availability	Accessible
	Up-to-date	Intelligent

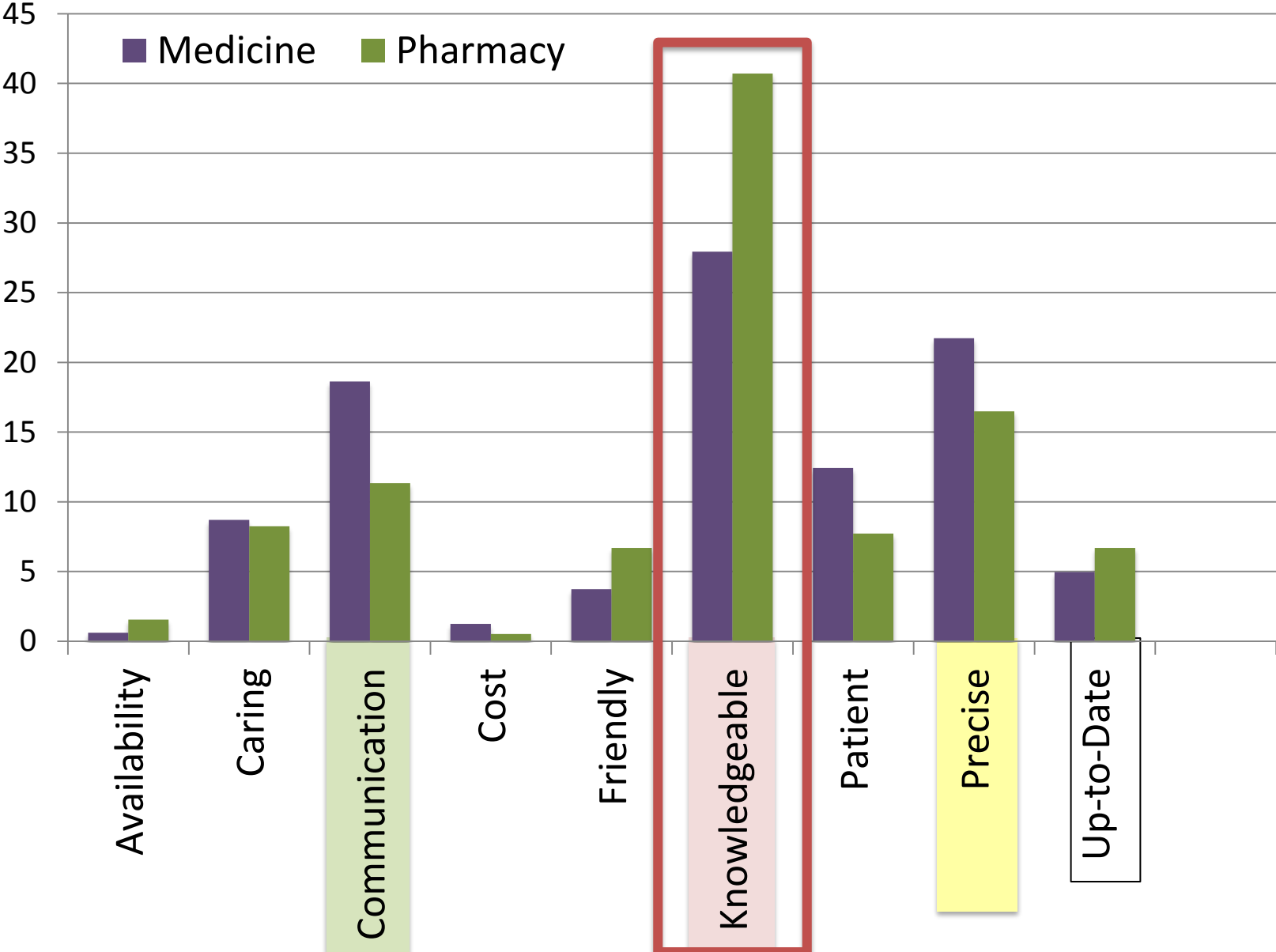
# 2014



# 2015

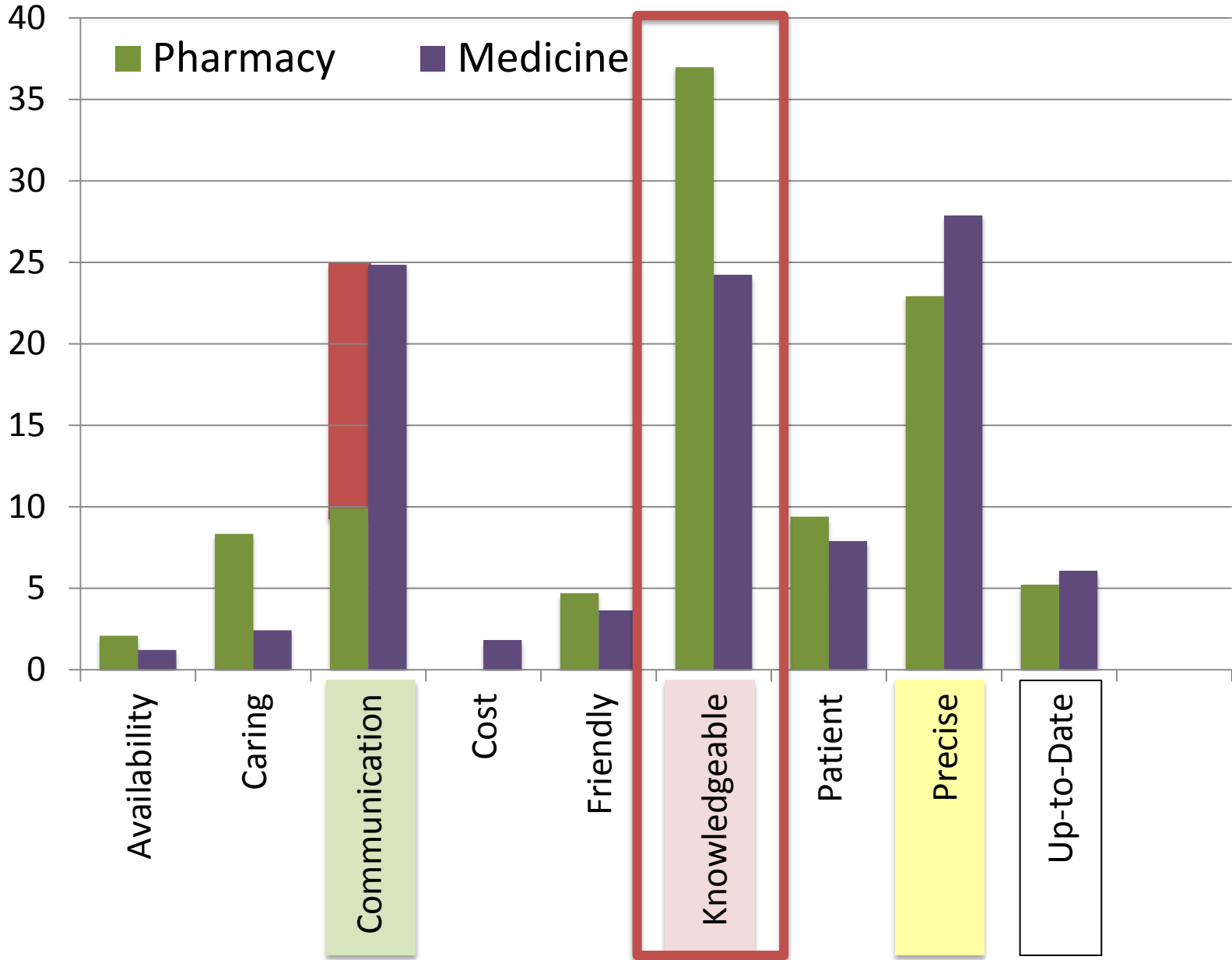


# Good Physician - 2017





# Good Pharmacist - 2017



QUESTION	RESPONSE
Age?	
Male or Female?	
Race?	
Do you have any chronic medical conditions for which you take prescription medications?	
If yes to above, how many prescription medications do you take per day?	
<p>Where do you get the bulk of your prescription?</p> <p>A. Chain pharmacy (e.g., Walgreens, CVS, Kroger)</p> <p>B. Pharmacy owned independent pharmacy</p> <p>C. Mail order pharmacy</p>	
<p>What type of insurance do you have?</p> <p>A. On my parents</p> <p>B. UT student</p> <p>C. Affordable Care Act (ACA)</p>	
Will you be taking any prescription medications in the next 12 months?	

# METHODS: Phase 1 – Survey

Student Demographics	age, sex, race
Medication Use	chronic disease requiring prescription drugs
Medications per Day	number taken
Type of Pharmacy Used	chain, independently owned, mail order
Type of Insurance	parents, UTHSC student, ACA
Personal Compliance	fully, partially, non-adherent

Rank the 9 items below according to what you believe to be the most important qualities of a GOOD physician or pharmacist. With 1 being the most important and 9 being the least important.

Rank	Quality
	Conscientious, dedicated, hard working
	Caring, compassionate, empathetic
	Friendly
	Good communicator
	Intelligent (IQ, very smart)
	Knowledgeable (This is not the same as intelligent. Current/up-to-date on new treatments and diagnosis related to health.)
	Available, easily accessible
	Patient with me and my questions
	Precise, accurate, attentive to detail, meticulous

# METHODS

Phase 1a	Survey first year medical students about THEIR perceptions of a “Good” physician
Phase 1b	Survey first year pharmacy students about THEIR perceptions of a “Good” pharmacist
Phase 2	Each medical and pharmacy student used the same survey to ask a non-healthcare individual their perceptions of a “Good” physician or pharmacist

# METHODS

Phase 3a	Two weeks later the same survey was used to ask medical students their perceptions of what makes a “Good” pharmacist
Phase 3b	Two weeks later the same survey was used to ask pharmacy student students their perceptions of what makes a “Good” physician
Phase 4	Students met during an interprofessional education session to discuss the finding and their respective roles in the healthcare system
Phase 5	Students completed a post-session survey evaluating their participation in an IPE event

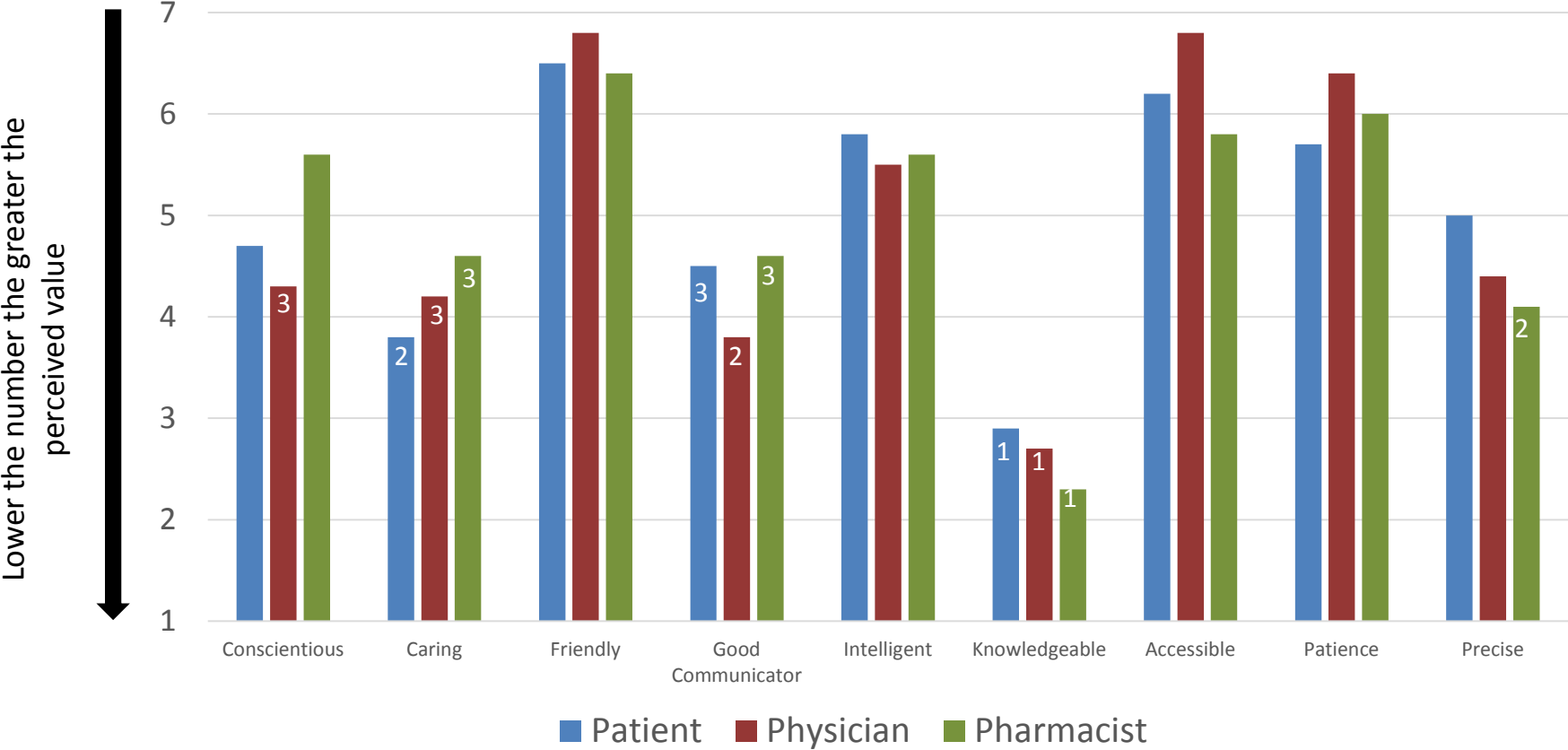
<b>Demographic</b>	<b>Medicine (n=162)</b>	<b>Pharmacy (n=173)</b>	<b>Patient (n=335)</b>
Age, years; mean $\pm$ SD (range)	25 $\pm$ 3 (21-48)	24 $\pm$ 3.5 (21-45)	50.3 $\pm$ 16 (18-90)
Females, %	42%	57%	61%
Race/ethnicity			

# Perceptions of what makes a good physician

	Patient n=335	Physician n=162	Pharmacist n=173	p-value
Conscientious	4.7 ± 2.3	4.3 ± 2.4	5.5 ± 2.2	<b>&lt;0.001</b>
Caring	3.8 ± 2.3	4.2 ± 2.1	4.4 ± 2.3	<b>0.011</b>
Friendly	6.5 ± 2.3	6.8 ± 2.0	6.3 ± 2.3	0.120
Good Communicator	4.5 ± 2.2	3.8 ± 2.0	4.6 ± 2.2	<b>&lt;0.001</b>
Intelligent	5.8 ± 2.8	5.5 ± 2.6	6.1 ± 2.6	0.128
Knowledgeable	2.9 ± 2.3	2.7 ± 2.0	2.6 ± 2.2	0.309
Accessible	6.2 ± 2.1	6.8 ± 2.1	6.1 ± 2.3	<b>0.004</b>
Patient	5.7 ± 2.3	6.4 ± 1.9	6.1 ± 2.1	<b>0.002</b>
Precise	5.0 ± 2.4	4.4 ± 2.5	3.3 ± 2.2	<b>&lt;0.001</b>



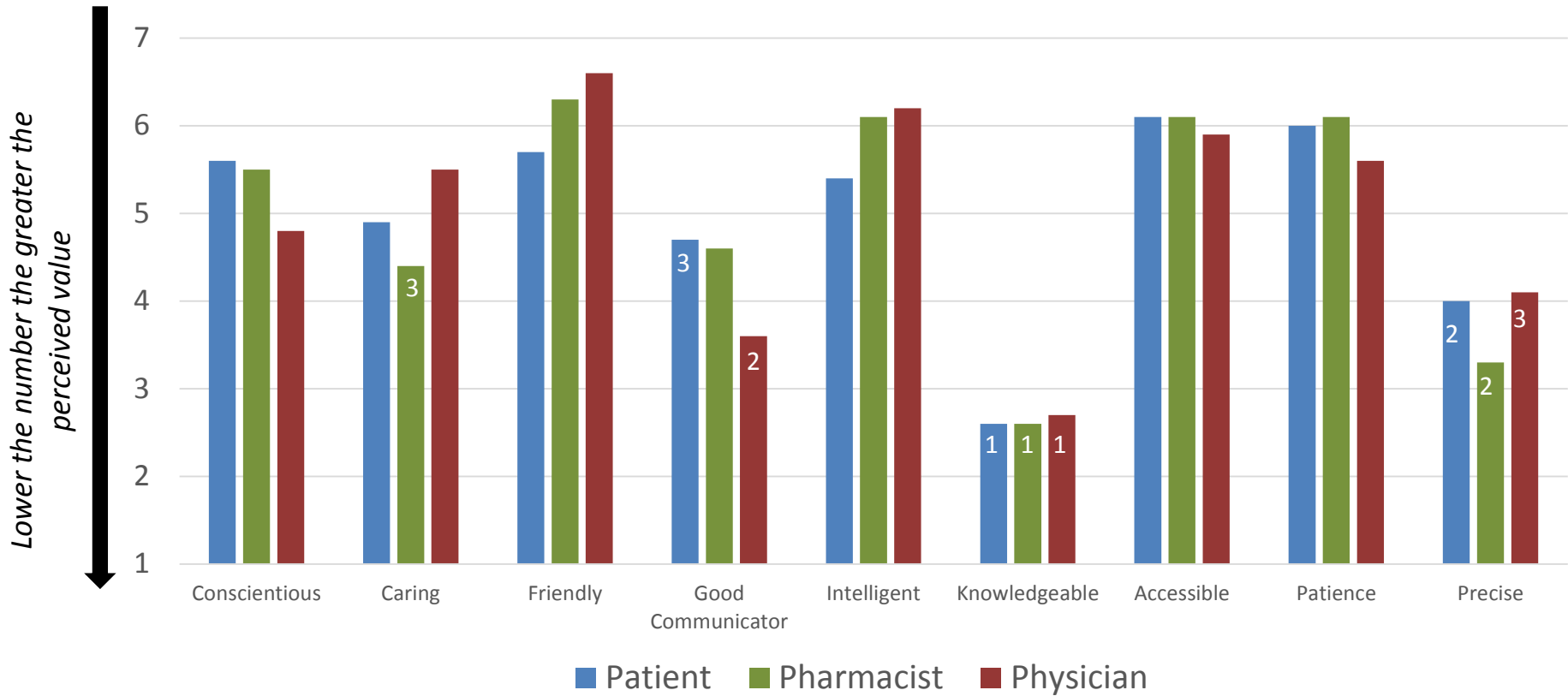
# Desired Values in a "Good" Physician



# Perceptions of what makes a good pharmacist

	Patient n=335	Physician n=162	Pharmacist n=173	p-value
Conscientious	5.6 ± 2.2	5.5 ± 2.2	4.8 ± 2.4	<b>&lt;0.001</b>
Caring	4.9 ± 2.3	4.4 ± 2.3	5.5 ± 2.4	<b>&lt;0.001</b>
Friendly	5.7 ± 2.5	6.3 ± 2.3	6.6 ± 2.3	<b>&lt;0.001</b>
Good Communicator	4.7 ± 2.3	4.6 ± 2.2	3.6 ± 2.0	<b>&lt;0.001</b>
Intelligent	5.4 ± 2.9	6.1 ± 2.6	6.2 ± 2.4	<b>0.002</b>
Knowledgeable	2.6 ± 2.2	2.6 ± 2.2	2.7 ± 2.0	0.870
Accessible	6.1 ± 2.3	6.1 ± 2.3	5.9 ± 2.3	0.616
Patient	6 ± 2.1	6.1 ± 2.1	5.6 ± 2.1	0.059
Precise	4.0 ± 2.5	3.3 ± 2.2	4.1 ± 2.2	<b>0.002</b>

# Desired Values in a “Good” Pharmacist



# Comparison of patients perceptions of what makes a good pharmacist or physician

	Physician n=162	Pharmacist n=173	p-value
Conscientious	4.7 ± 2.3	5.6 ± 2.2	<0.001
Caring	3.8 ± 2.3	4.9 ± 2.3	<0.001
Friendly	6.5 ± 2.3	5.7 ± 2.5	0.003
Good Communicator	4.5 ± 2.2	4.7 ± 2.3	0.417
Intelligent	5.8 ± 2.8	5.4 ± 2.9	0.201
Knowledgeable	2.9 ± 2.3	2.6 ± 2.2	0.223
Accessible	6.2 ± 2.1	6.1 ± 2.3	0.679
Patient	5.7 ± 2.3	6 ± 2.1	0.213
Precise	5.0 ± 2.4	4.0 ± 2.5	<0.001

**Post-Survey:** What did you learn through participation in this interprofessional activity?



# RESULTS

After participation in this session, I can:	M1 (n=162)	P1 (n=173)
explain the <b>roles and responsibilities</b> of other health care providers	4.1 ± 0.8	4.4 ± 0.6

*1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree*

# RESULTS

	P1	M1
Participating in this session enabled me to become a more effective member of a health care team.	4.3 ± 0.8	4.0 ± 0.9
Patients will ultimately benefit if health care professionals work together to solve patient problems.	4.8 ± 0.4	4.8 ± 0.4
Learning with other health care professionals will increase my ability to understand clinical problems.	4.6 ± 0.7	4.5 ± 0.7
Learning with other health care students before graduation will improve relationships in future clinical practice.	4.6 ± 0.7	4.5 ± 0.6
Interaction with students and faculty from other professions changed my understanding of the practice activities and expertise of the professions they represent.	4.4 ± 0.8	4.3 ± 0.8
My respect for the other profession increased as a result of my participation in this session.	4.4 ± 0.7	4.4 ± 0.7

*1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree*

# CONCLUSIONS

## Qualities of a GOOD Physician

- Overall, there was agreement among patients, medical students and pharmacy students that “Knowledgeable” was the most important quality of a GOOD physician.
- Likewise, there was agreement among patients, medical and pharmacy students that “Friendly” and “Intelligent” were less important qualities of a GOOD physician.
- There were differences noted among patients, medical and pharmacy students in the rankings of the following qualities: Conscientious, Caring, Good Communicator, Accessible, Patient and Precise. Analysis between groups will be conducted to determine which groups are contributing to the differences.



# CONCLUSIONS

## Qualities of a GOOD Pharmacist

- Similar to what was identified in the Physician traits, there was agreement among patients, medical students and pharmacy students that “Knowledgeable” was the most important quality of a GOOD pharmacist.
- There was also agreement among patients, medical and pharmacy students that “Accessible” and “Patient” were less important qualities of a GOOD pharmacist.
- There were differences noted among patients, medical and pharmacy students in the rankings of the following qualities: Conscientious, Caring, Friendly, Good Communicator, Intelligent and Precise. Analysis between groups will be conducted to determine which groups are contributing to the differences.

# CONCLUSIONS

## FUTURE DIRECTIONS

- Complete a paired-data survey with patients
  - Have the same patient evaluate both a physician and a pharmacist, but on a different day
  - Consider adding another profession to the session

# QUESTIONS

