



Révélation des préférences dans la recherche en pharmacie Revue de littérature

Dre. C.Perraudin

Séminaire de recherche « Méthodes de révélation des préférences et application à la question de la qualité de l'offre de soins de premier recours »

Jeudi 07 décembre 2017



Contexte

- ↑ Demande de soins & Réorganisation des soins primaires
- Extension des prérogatives du pharmacien d'officine

➔ **Quelle(s) prestation(s) implémenter ?**



RCT Efficacy/Effectiveness

EFFICACITE

DCE

Preferences/
Acceptability

Public/Patient
Willingness to pay

Pharmacist
Implementation/Job

Other HCP
Continuity/Collaboration

Healthcare system
Allocation of resources

CEA

Cost-effectiveness/
Efficiency

ECONOMICITE

ADEQUATION

⇒ Development of **optimal services** :

⇒ that patients will use, are willing to pay for

⇒ that providers will deliver, are willing to implement in routine care

⇒ are sustainable and economically viable in the future

Discrete choice experiment

Respondents are asked to choose their preferred alternative from a set of two or more alternatives in which each alternative is defined by attributes of the alternative

Steps	Methodology tools
To identify attributes and levels	Literature review Qualitative research Experts
To develop the experimental design and construction of choice sets	Qualitative research Bayesian methods
To collect data	Structured questionnaires Postal survey Face-to-face interviews
To analyse data	Regression models
To interpret data	Qualitative research Analytical techniques to identify/quantify heterogeneity

Objectif & Méthode

Revue non systématique !

- ✓ Préférences de qui ? Pour quoi ? Questions de recherche ?
- ✓ Méthodologie : quels attributs ?
- ✓ Résultats et implications contextuelles

Sélection des articles

- ✓ Discrete choice experiments impliquant au moins un service pharmaceutique / la pharmacie / le pharmacien
- ✓ Revues systématiques de littérature
 - ❖ Naik-Panvelkar et al. Discrete choice experiments in pharmacy : A review of the literature. Int J Pharm Pract 2013
 - ❖ Vass et al. Discrete choice experiments of pharmacy services: a systematic review. Int J Clin Pharm 2016
- ✓ Recherche Pubmed / boule de neige

Résultats ($n=25$)



[2002 – 2009] : 12 articles [2010-2017] : 13 articles

- **Patients' / Public' s preferences ($n=16$)**
 - Prestations pharmaceutiques ($n=8$)
 - Prise en charge des pathologies mineures ($n=5$, *Royaume-Uni*)
 - Contrat d'assurance ($n=2$, *Pays-Bas*)
 - OTC génériques ($n=1$)
- **Pharmacists' preferences ($n=5$)**
 - Prestations pharmaceutiques ($n=3$)
 - Niveau de compensation acceptable pour une prestation ($n=2$, *Etats-Unis*)
- **Both ($n=4$)**
 - Patients/Physicians/Pharmacists haemophilia treatment ($n=2$)
 - Pharmacists/GPs electronic prescribing systems ($n=1$)
 - Public/carers/HCP Chronic Disease management at pharmacies ($n=1$)

Résultats ($n=25$)



[2002 – 2009] : 12 articles [2010-2017] : 13 articles

- **Patients' / Public' s preferences ($n=16$)**
 - Prestations pharmaceutiques ($n=8$)
 - Prise en charge des pathologies mineures ($n=4$, *Royaume-Uni*)
 - Contrat d'assurance ($n=3$)
 - OTC génériques ($n=1$)
- **Pharmacists' preferences ($n=5$)**
 - Prestations pharmaceutiques ($n=3$)
 - Niveau de compensation acceptable pour une prestation ($n=2$, *Etats-Unis*)
- **Both ($n=4$)**
 - Patients/Physicians/Pharmacists haemophilia treatment ($n=2$)
 - Pharmacists/GPs electronic prescribing systems ($n=1$)
 - Public/carers/HCP Chronic Disease management at pharmacies ($n=1$)

Patients/Public's preferences



Prestations pharmaceutiques (n=9)



- **Prescribing pharmacist for chronic patients (n=2)**

Gerard et al. Value Health 2012;15 ; Tinelli et al. Int J Pharm Pract 2009;17

- **Provision of emergency hormonal contraception services (n=1)**

Seston et al. Pharm World Sci 2007;29



- **Services to manage chronic conditions (n=1)**

Whitty et al. Res Soc Admin Pharm 2015;11

- **Asthma services in pharmacy (n=2)**

Naik-Panvelkar et al. Journal of Asthma 2012; 49; Naik- Panvelkar et al. Pharmacoeconomics 2012;30



- **Medication Therapy Management services (n=1)**

Hong et al. J Am Pharm Assoc 2011;51

- **Primary healthcare services (n=1)**

Feehan et al. J Clin Pharm Ther 2007;42



- **Medication Therapy Management services (n=1)**

Tsao et al. Can Pharm J 2015;148

Sélection des attributs ($n=9$)



- Moyenne = 6.5 attributs [min 4 –max 11]
- FG/entretiens ($n=5$), littérature ($n=5$), experts ($n=2$)

Thematic	Example of attributes (n=59)
Type of service offered ($n=9$)	<ul style="list-style-type: none"> • Pharmacist prescribing (Whitty et al. 2015) • Provision of lung function testing (Naik-Panvelkar et al. 2012) • Physical examinations (Feehan et al. 2017)
Communication/relationships ($n=9$)	<ul style="list-style-type: none"> • Interaction with pharmacy staff (Naik-Panvelkar et al. 2012) • Professional's words and explanations about your medicines (Gerard et al. 2012) • Type and depth of advice provision (Naik-Panvelkar et al. 2012)
Cost ($N=7$)	<ul style="list-style-type: none"> • Cost of service (Naik-Panvelkar et al. 2012)
Duration ($n=6$)	<ul style="list-style-type: none"> • Length of consultation (Gerard et al. 2012)
Process of service ($n=6$)	<ul style="list-style-type: none"> • Frequency of visits (Naik-Panvelkar et al. 2012) • Service setting (Hong et al. 2011) • Private area available (Seston et al. 2007)
Access to pharmacist ($n=5$)	<ul style="list-style-type: none"> • Appointment/walk-in anytime (Feeham et al. 2017) • Time to appointment (Tsao et al. 2015)
Outcomes of the service ($n=4$)	<ul style="list-style-type: none"> • Chance of receiving the «best» treatment (Tinelli et al. 2009) • Number of days with asthma symptoms (Naik-Panvelkar et al. 2012)

Sélection des attributs ($n=9$)



- Moyenne = 6.5 attributs [min 4 –max 11]
- FG/entretiens ($n=5$), littérature ($n=5$), experts ($n=2$)

Thematic	Example of attributes ($n=59$)
Service provider ($n=3$)	<ul style="list-style-type: none">• Pharmacist / nurse / nurse practitioner (Hong et al. 2011)
Practical aspects ($n=3$)	<ul style="list-style-type: none">• Pharmacy location (Whitty et al. 2015)• Hours of operation (Feeham et al. 2017)
Integration ($n=2$)	<ul style="list-style-type: none">• Referrals / other health providers in the pharmacy (Whitty et al. 2015)• Access to medical record (Feeham et al. 217)
Getting your medicines ($n=2$)	<ul style="list-style-type: none">• Face to face / drive thru / home delivery (Whitty et al. 2015)• Prescription ordering availability by telephone/internet (Feeham et al. 2017)
CP's characteristics ($n=2$)	<ul style="list-style-type: none">• Geriatric Experience (Hong et al. 2011)• Years of practice (Hong et al. 2011)
Patient's characteristics ($n=1$)	<ul style="list-style-type: none">• Number of drug therapy problems (Hong et al. 2011)

Minor illness management (n=2)



- 40% des consultations GP « pathologies mineures » « évitables »
- Soutien gouvernemental du rôle du pharmacien et « *Minor ailment scheme* »

⇒ Quels facteurs influencent la prise de décision des citoyens dans la prise en charge des symptômes/pathologies mineures ?

Preferences for self-care or professional advice for minor illness:

a discrete choice experiment

Terry Porteous, Mandy Ryan, Christine M Bond and Phil Hannaford ©British Journal of General Practice 2007; 57: 911–917.

Managing Minor Ailments; The Public's Preferences for Attributes of Community Pharmacies. A Discrete Choice Experiment

Terry Porteous¹, Mandy Ryan², Christine Bond³, Margaret Watson¹, Verity Watson²*

Minor illness management ($n=2$)



Preferences for self-care or professional advice for minor illness:

a discrete choice experiment

Terry Porteous, Mandy Ryan, Christine M Bond and Phil Hannaford ©British Journal of General Practice 2007; 57: 911–917.

Which option would you choose ?



Box 2. Discrete choice experiment symptom scenario.


Please imagine this situation:

- ▶ You have a headache and a fever, your bones are aching and your nose feels slightly blocked. You are still able to do all the things you usually do but are more tired than usual. The symptoms started to appear 4 days ago, and were slightly worse when you woke up this morning.

Objectives :

1. To determine the relative importance of factors that influence decision making in the management of minor illness
2. How people trade between these factors

Table : Attributes (n=3) and levels

Type of management : GP consultation Pharmacy advice Practice nurse consultation NHS 24 telephone advice Complementary therapist advice Self-care Do nothing	Availability : 0/1/5 hours 1/2/5 days
Cost: £2/5/7/15	 WTP

Box 3. Example of a choice question

Which option would you choose?

	Option 1	Option 2
Type of management	Self-care	GP
Availability	1 hour	2 days
Cost	£2	£7

Tick one box only:

Option 1 Option 2 Do Nothing

Results (*n*= 293)



- ✓ All attributes contributed to responders' preferences (sign. coefficients)
- ✓ Responders prefer waiting less time and paying less money (<0 coefficients)

- ✓ For the same levels for availability and cost :
 - They preferred to do something compared with doing nothing
 - **Self-care was the preferred option**
 - Pharmacy advice
 - GP consultation (but not sign. difference)

- ✓ All other things being equal:
 - WTP self-care : £23 > WTP GP advice : £17 > WTP NHS 24 : £4.4
 - WTP : £3.69 to reduce waiting time by 1 day



A less preferred type of management became more attractive when waiting time and cost were reduced

Minor illness management ($n=2$)



Managing Minor Ailments; The Public's Preferences for Attributes of Community Pharmacies. A Discrete Choice Experiment

Terry Porteous¹, Mandy Ryan², Christine Bond³, Margaret Watson¹, Verity Watson²*

PLOS ONE | DOI:10.1371/journal.pone.0152257 March 31, 2016

Which option would you choose ?



Please imagine this situation:

- You have a headache and a fever, your bones are aching, you have a sore throat and your nose feels slightly blocked up. You are still able to do all the things you usually do but are more tired than usual. The symptoms started to appear four days ago and were slightly worse when you woke up this morning.
- A doctor's appointment is not available for 7 days and you don't have any of the medicines you might need at home.

Objectives :

1. To establish the public's preferences for pharmacy services attributes when managing minor illness
2. How people trade between these factors



Pharmacy A



Pharmacy B




Do nothing

Which option would you choose ?



Table : Attributes (n=8) and levels

<p>Who you are served by A pharmacist A(n)(un)trained medicine counter assistant</p>	<p>Understanding of symptoms and how to manage them after speaking to pharmacy staff Yes/No</p>	<p>Pharmacy location At the local shops In a shopping centre In a supermarket Beside a doctor's surgery</p>
<p>Attitude of staff (Not) friendly and approachable</p>	<p>Questions asked by pharmacy staff about symptoms and/or general health Yes / No</p>	<p>Car parking availability Definitely / Probably / Unlikely / No</p>
<p>Availability 5 / 12 hours 1 / 2 days</p>	<p>Cost : \$2.5 / 7.5 / 15 / 25</p>	<p> WTP</p>

Results *(n=1049)*



- ✓ All attributes contributed to responders' preferences (sign. coefficients)
- ✓ Respondents preferred visit a pharmacy than doing nothing (WTP = £38)

- ✓ **The most important attributes**
 - Whether or not the pharmacy visit would give them a better understanding of their symptoms and how to manage them (WTP = £6.28)
 - Being served by a trained staff member (pharmacist or technician) and friendliness/approachability

- ✓ WTP = \$5.52 to reduce waiting time by 1 day

- ✓ The most preferred locations for pharmacies were at the local shops or next to the GP surgery; pharmacies in shopping centres and supermarkets reduced WTP

Results (n=1049)

Table 6. Utility scores, willingness-to-pay and probability of uptake for 'best pharmacy', 'worst pharmacy' and 'do nothing' alternatives.

	Best pharmacy	Worst pharmacy	Do nothing
Pharmacy location	Local shops	Shopping centre	You go nowhere
Find a car park space nearby	Definitely	No	
Waiting time until you can deal with symptoms	5 hours	2 days	No wait
You are served by	Pharmacist	Untrained medicine counter assistant	You don't speak to a health professional
Who is	Friendly and approachable	Not friendly and approachable	
Asks questions about your symptoms/general health	Yes	No	
After speaking with pharmacy staff	You understand your symptoms better and you feel like you know the best thing to do to manage them	You don't understand your symptoms any better and you don't feel like you know the best thing to do to manage them	No different
Willingness to pay (95% CI)	£55.43 (49.24, 61.62)	£5.76 (£0.30, £11.24)	£0
Cost	£2.50	£25.00	£0
Utility score (95% CI)	3.16 (2.79, 3.53)	-1.15 (-1.50, -0.80)	0
Probability of uptake	94.7%	1.3%	4%

➔ Respondents would be more likely to «do nothing» about symptoms than use the «worst» pharmacy service

Pharmacists' preferences



Which job would you prefer ?



Imagine that in the future you are looking for a new position and have been offered two jobs, A and B.
You have negotiated terms and conditions.

For some new roles below, assume that you have been trained.

In each of the 6 questions on the next page, you are asked to choose which job you prefer.

When answering the six questions on the next page:

- assume all other characteristics are the same between jobs
- answer all choices – assume that these are the only options available to you
- there are no right or wrong answers
- job A is the same for all six questions, and job B is different

Objectives :

1. To determinate CP's preferences for optimal employment

1. To evaluate how the choice differ according to CPs' characteristics

Q48. Which job would you prefer?

The team in the pharmacy
Medication review
Change in annual income
Repeat dispensing and chronic disease management
Change in the number of scripts dispensed per month
Integration and links with primary and secondary care
Minor illness and health promotion

Job A
Extended
None
No change
Repeat dispensing plus chronic disease management
No change
Some formal links
Minor illness

Job B
Extended
In the GP's surgery
+20%
Simple repeat dispensing
No change
Fully integrated
Minor illness and health promotion

Tick one box only

Prefer job A



Prefer job B



Prestations pharmaceutiques (n=3)



Pharmacists' Preferences for Providing Patient-Centered Services: A Discrete Choice Experiment to Guide Health Policy

Kelly A Grindrod, Carlo A Marra, Lindsey Colley, Ross T Tsuyuki, and Larry D Lynd



Preferences of Community Pharmacists for Extended Roles in Primary Care

A Survey and Discrete Choice Experiment

Anthony Scott,¹ Christine Bond,² Jackie Inch² and Aileen Grant²






Pharmacist's Demand for Optimal Primary Care Service Delivery in a Community Pharmacy: The OPTiPharm Study

Mark A. Munger, PharmD¹, Michael Walsh, MS², Jon Godin, MS², and Michael Feehan, PhD¹





Méthodes



	Grindrod et al. (2010) 	Scott et al. (2007) 	Munger et al. (2017) 
Attributs	N=6	N=7	N= 13
Type de service	<ul style="list-style-type: none"> • Medication Therapy Management • Chronic Disease Management • Screening • Traditional services 	<ul style="list-style-type: none"> • Medication review • Chronic Disease Management • Health promotion advice • Repeat Prescribing • Minor illness advice 	<ul style="list-style-type: none"> • Medication services • Drug prescribing • Diagnostic testing • Preventive services • Physical examination
Setting	<ul style="list-style-type: none"> • Pharmacy • Clinic 	<ul style="list-style-type: none"> • GP surgeries • Pharmacy 	-
Δ Income	• -15% / No /+ 15%	• No / +10% / + 20%	• -10/-5%/No/+5/+10%
Job context	• Job satisfaction	• Pharmacy team	<ul style="list-style-type: none"> • Workload • Operation hours
Education required	<ul style="list-style-type: none"> • Workshop (2 days) • CDM course (1 week) 	-	<ul style="list-style-type: none"> • Procedure training • Continued education • Certification
Others	• Professional service fee : \$100/150 per service hour	<ul style="list-style-type: none"> • Change in prescription volume • Integration with primary and secondary care 	<ul style="list-style-type: none"> • Service provider • Medical records • Service logistics • Prescription ordering, availability, information

Conclusion



	Grindrod et al. (2010) 	Scott et al. (2007) 	Munger et al. (2017) 
	N=539	N=914	N= 291
Results Services	<ul style="list-style-type: none"> Medication therapy management Chronic disease management Screening Typical pharmacy services 	<ul style="list-style-type: none"> Minor illness services Repeat prescription / Chronic disease management not significant predictors of job choice 	<ul style="list-style-type: none"> Vital sign measurements POC laboratory testing Immunization services Drug prescribing Physical examination Diagnostic testing
Results most influent factors	<ul style="list-style-type: none"> Income Job satisfaction 	<ul style="list-style-type: none"> Pharmacy team Integration with primary and secondary care 	<ul style="list-style-type: none"> Academic degree <20 years' experience Working >40h/week Rural areas
	CPs would provide MTM as long as job security and satisfaction were preserved	CPs place the highest value on organizational aspects of work rather than on the included services	CPs would provide these services with dedicated time and a modest income increase

Lien avec l'implémentation des prestations pharmaceutiques



Comparaison avec les préférences des patients

Attribute	Base-case pharmacy	Optimal pharmacy
Hours of operation	9 am to 5 pm, closed Sundays (limited weekend hours)	Same
Prescription ordering, availability and information	Telephone or online Internet ordering, and two-way discussion with pharmacist (telephone or online)	Same
Service provider	Pharmacist	Pharmacist (with physician oversight)
Medical records	Prescription records only held at the pharmacy and not put into your (the patient's) medical record	The pharmacy has access to, and can enter prescriptions and health information into your (the patient's) electronic medical record
Service logistics	(Patients) Walk in and wait for services	(Patients) Walk in and wait for service or make an appointment (via telephone or online)
Physical examinations	Not provided	Blood pressure, heart rate and breathing rate
Diagnostic testing	Not provided	Diabetes and lipid/cholesterol measurements plus testing for common infections including influenza, hepatitis, tuberculosis and HIV and conducting chemistry, urine, saliva and other blood tests
Preventive services	Only vaccinations/immunizations	Vaccinations/immunizations and health screening (e.g mental health, lung function)
Drug prescribing	Not provided	Drugs prescribed at the pharmacy by a Pharmacist (with physician oversight)
Medication services	Meeting with pharmacist to discuss new prescriptions. Medication refill reminders (e.g by phone, text or Internet)	Same
Cost of services	\$0	\$15

Optimal Pharmacy for Pharmacists



Same

Same

Pharmacist (with physician oversight)

The pharmacy has access to, and can enter prescriptions and health information into the patient's electronic medical record

Same

Blood pressure, heart rate, and breathing rate

Diabetes and lipid/cholesterol measurements plus testing for common infections, including influenza, hepatitis, tuberculosis, and HIV

Same

Drugs prescribed at the pharmacy by a pharmacist (with physician oversight)

Same



Willingness-to-accept (WTA) ($n=2$)

- Medicare Modernization Act (2003) : Medication Therapy Management services
- Heterogeneity of compensation system [\$30-\$100] per hour VS [\$120-180] by expert
- Inadequate compensation as a barrier

=> Quel est le niveau acceptable de compensation pour que les pharmaciens délivrent le service ?

Pharmacists' acceptable levels of compensation
for MTM services: A conjoint analysis

Research in Social and

Junling Wang, Ph.D., M.S.^{a,*}, Song Hee Hong, Ph.D.^a, Administrative Pharmacy 7 (2011) 383–395

Songmei Meng, M.S.^a, Lawrence M. Brown, Pharm.D., Ph.D.^b

Contingent Valuation and Pharmacists' Acceptable Levels of Compensation for Medication Therapy Management Services

Junling Wang, Ph.D. [Associate professor] and

College of Pharmacy, University of Tennessee Health Science Center, Memphis, TN

Song Hee Hong, Ph.D. [Associate Professor]

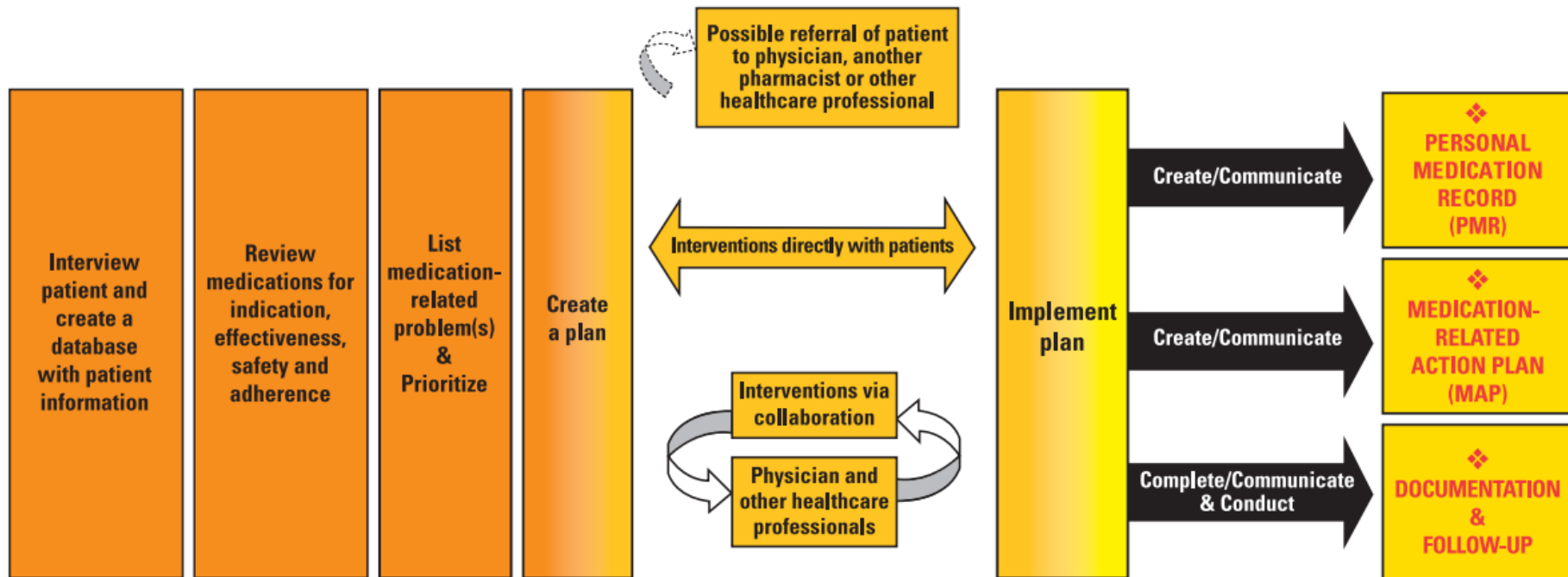
College of Pharmacy, University of Tennessee Health Science Center, Memphis, TN

Medication Therapy Management



❖ MEDICATION THERAPY REVIEW

❖ INTERVENTION AND/OR REFERRAL





Willingness-to-accept (WTA) ($n=2$)

Pharmacists' acceptable levels of compensation
for MTM services: A conjoint analysis

Junling Wang, Ph.D., M.S.^{a,*}, Song Hee Hong, Ph.D.^a,
Songmei Meng, M.S.^a, Lawrence M. Brown, Pharm.D., Ph.D.^b

Research in Social and
Administrative Pharmacy 7 (2011) 383–395

Discrete choice experiment (n=348)



Objectives :

1. To determine CPs' acceptable levels of compensation for MTM services
2. To evaluate how they vary with attributes of MTM services
3. To determine how they differ according to CPs' characteristics
 - Demographics : age, sex, race, ethnicity, highest academic degree
 - Practice setting : independent/other
 - Position : store owner/other, years of practice, income
 - Prior experience providing MTM services

Table : Attributes (n=6) and levels

Type of patient : New / returning	Patient's annual drug costs : \$2000/3000/4000
Patient's number of chronic conditions : 1/3/6	Service duration: 15/30/45 minutes
Patient's number of medications : 4/8/16	Price of MTM services : \$30/60/120

Discrete choice experiment (n=348)



Question : Select 1 scenario from each pair of packages of MTM services (n=13)

An example of a pairwise comparison of packages using a discrete choice approach

Attribute	Choice 1	Choice 2	Choice 3 (neither choice 1 nor choice 2)
Patient type	Returning	Returning	
Patient's number of conditions	6	3	
Patient's number of medications	16	16	
Patient's annual drug cost	\$3000	\$2000	
Service duration	30 min	45 min	
Price of MTM services	\$60	\$60	
Please check the box of your preferred choice	Prefer choice 1 <input type="checkbox"/>	Prefer choice 2 <input type="checkbox"/>	Prefer choice 3 <input checked="" type="checkbox"/>

Results (n=348)

- ✓ Service duration and price contributed to responders' preferences (sign. coefficients)
- ✓ WTA = **\$1.44/min** (\$86.4/h)
- ✓ For a 30-minute MTM session for a new patient with 2 medical conditions, 8 medications and an annual drug cost of \$2000, CPs were willing to accept **\$42.61**
- ✓ WTA was significantly associated with :
 - Higher WTA: years of practice, having provided MTM previously
 - Lower WTA : pharmacy owner (vs nonowner)

Current compensation [\$30-\$100/hour]



Compensation need to be increased to increase participation in these services

Willingness-to-accept (WTA) ($n=2$)

Contingent Valuation and Pharmacists' Acceptable Levels of Compensation for Medication Therapy Management Services

Junling Wang, Ph.D. [Associate professor] and

College of Pharmacy, University of Tennessee Health Science Center, Memphis, TN

Song Hee Hong, Ph.D. [Associate Professor]

College of Pharmacy, University of Tennessee Health Science Center, Memphis, TN

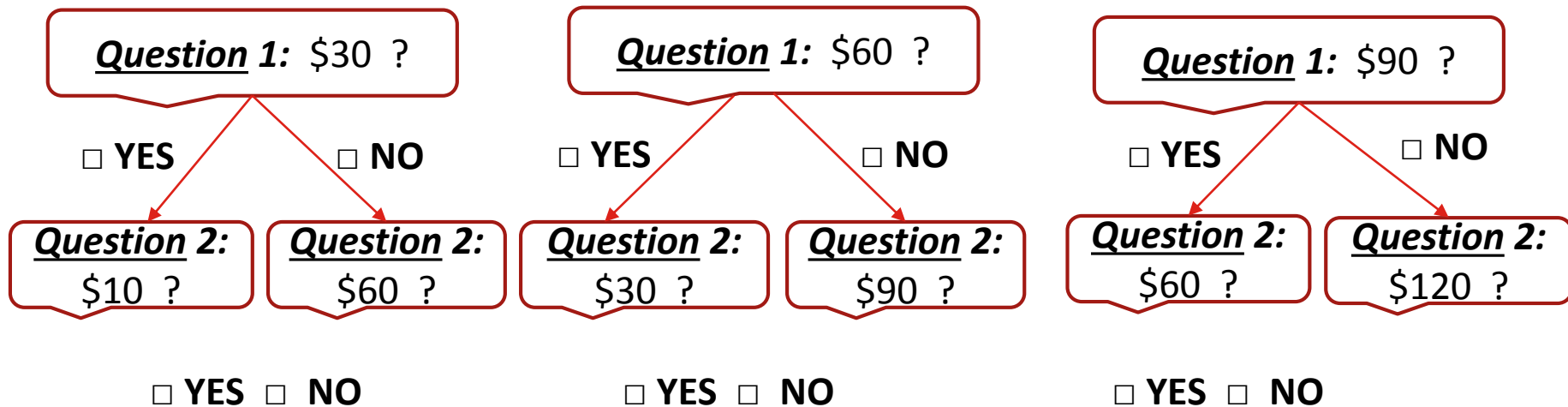
Res Social Adm Pharm. 2015 ; 11(3)



Contingent Valuation (n=348)

Objectives :

1. To determine CPs' acceptable levels of compensation for a 30-minute MTM session for a new patient with 2 medical conditions, 8 medications and an annual drug cost of \$2000
2. To determine how they differ according to CPs' characteristics



Results (*n*=348)



- ✓ The proportions of pharmacists willing to accept :
\$30 : 31% \$60 : 85% \$90: 91%
- ✓ For a 30-minute MTM session for a new patient with 2 medical conditions, 8 medications and an annual drug cost of \$2000, CPs were willing to accept **\$63.31** (median \$60) ⇔ **\$2.11/min**
- ✓ WTA was significantly associated with
 - Higher WTA: practice setting, having provided MTM previously

Current compensation [\$15-\$50]

Patients' WTP < \$40 (Suh 2000, Hong et al. 2011, Barner and Branvold 2005)



To advocate for higher MTM compensation levels by third-party payers
To combine with out-of-pocket to reach sufficient compensation levels

Merci pour votre attention !



BACK UP

Résultats – (n=25)

Public/patients (n=16)

- PEC pathologies mineures (N=5)

Porteous 2016 UK
Porteous 2006 UK
Caldow 2007 UK
Gerard 2015 UK
Seston 2007 UK

- Prestations pharmaceutiques (N=7)

Gerard 2012 UK (prescribing pharmacist for chronic patients)
Tinelli 2009 UK (Prescribing-dispensing services in pharmacy)
Naik-Panvelkar 2012 Australie (asthma services in pharmacy)
Naitk- Panvelkar 2012 Australie (asthma services in pharmacy)
Feehan 2007 USA (primary healthcare services)
Hong 2011 USA (Medication therapy management)
Tsao 2015 Canada (Medication management services)

- Contrat d'assurance (n=3)

Boonen 2009 Pays-Bas (channeling strategies)
Bonnen 2011 Pays-Bas (channeling strategies)
Wellman 2008 USA (prescription benefit insurance, dont MTM)

- OTC Génériques (n=1)

Halme 2009 Finlande

Pharmaciens (n=5)

- Prestations pharmaceutiques (n=3)

Gindrod 2010 Canada
Scott 2007 UK
Munger 2017 USA

- Niveau de compensation pour MTM (n=2)

Wang 2011 USA
Wang 2015 USA

Both (n=4)

- Pharmaciens/GP electronic prescribing systems (n=1)

Ubach 2002 UK

- Public/carers/HCP CDM at pharmacies (n=1)

Whitty 2015 Australie

- Patients/Physicians/Pharmacists haeéophilia treatment (n=2)

Scalone 2009 Italie
Mantovani 2005 Italie



Results

- **Suh 2000 (Contingent valuation, n=316)**
 - WTP out-of-pocket = [\$4.02;\$5.45/prescription], dependent on the level of risk reduction
 - WTP insurance premium = [\$28.79-\$36.29/year]

=> WTP = \$5.57 CP's consultation, + \$0.87/added minute for counseling time
- **Barner et al. 2005 (Contingent valuation, n=203) :**
 - WTP women = \$20-\$40 for 30-min of menopause and hormone replacement therapy consultations
- **Hong et al. 2011 (Discrete choice experiment, n=355) :**
 - Lower (statistically insignificant) utility with a longer MTM session (30 min) than with a shorter session => no estimation WTP value for 30-min