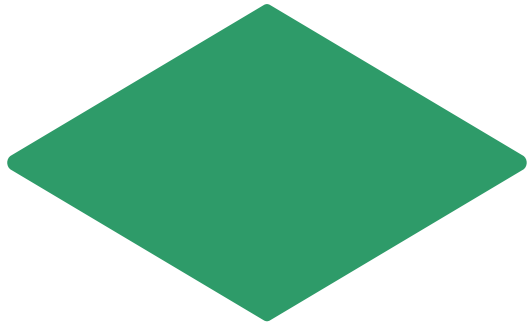
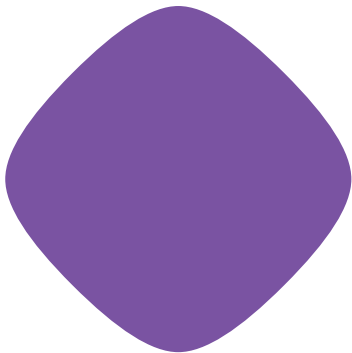


POTENTIAL PHARMACIES

James King



A project investigating the future of the pharmacy

As more people seek to actively manage their health, the traditional relationship between the pharmacist and the patient is changing. Through the use of drawing as well as talking, interviews with several pharmacy users helped to identify the sources of their current dissatisfaction and reveal fresh opportunities for the pharmacy.

Building on these insights, this project proposes five potential types of pharmacy, each illustrating a different model of interaction between the patient and the pharmacist.

This project is a collaboration between Design Interactions, the Helen Hamlyn Centre – both at the Royal College of Art – and Lloydspharmacy.



**helen
hamlyn
centre**

Lloydspharmacy
Your local health authority



celesio
the healthcare group

Foreword

This publication describes the outcomes of a research collaboration between Lloydspharmacy and the Royal College of Art, London, as part of our ongoing work into investigating the future of the pharmacy.

The *Potential Pharmacies* study supplements other dimensions of our research into how pharmacies might develop in the future. While we know a growing amount about the technical, logistical and retail display aspects of the future, we identified as a ‘knowledge gap’ in our understanding the ‘soft factors’ of how pharmacists interact with their customers, the nature of those relationships and the new types of pharmacy that might emerge to support them.

We worked with two departments of the RCA, Design Interactions and the Helen Hamlyn Centre, to develop our own point of view on the issue. The study, led by Research Associate James King, used the medium of drawing to explore the complex nature of pharmacist-patient interactions and worked with a user group to tease out the implications.

We believe this user-led approach has produced a number of very helpful insights. The resulting proposals are not intended as business models to be implemented; they are concepts intended to provoke and stimulate debate within the Lloydspharmacy and, more widely, the Celesio community about the future of the pharmacy.

Andy Murdock

Pharmacy Director,
Lloydspharmacy

Part one

INTRODUCTION & RESEARCH

- 5 Introduction
- 6 Interviewees
- 7 The interview process
- 9 Drawing and talking
- 14 Responding to design proposals

Introduction

The pharmacy at the moment

The pharmacy sits on the border between the healthcare system and the commercial domain. You can walk into any pharmacy and expect to receive advice, medication and care dispensed with a high degree of expertise and safety, or buy shampoo. That the pharmacy fulfils these widely differing needs is the reason pharmacists often suffer the misconception that they are a specialised shopkeeper (see page 6). It is also the reason why pharmacists are yet to decide whether they are serving ‘customers’ or treating ‘patients’ and will use both these terms interchangeably.

This project examines the complicated relationship between the pharmacy and the pharmacy-user. This is a relationship that is set to play a more prominent part in UK healthcare due to two important developments. Firstly, the advisory role of the pharmacist has recently been emphasised by the introduction of the Medicine Use Review (MUR) – a personal consultation between the patient and the pharmacist, analogous to a doctors appointment. Secondly, some pharmacists have also been given the ability to prescribe medication directly to the patient allowing them more autonomy to treat patients directly.

Active patients

These developments within the field of pharmacy are occurring amongst more fundamental shifts in the nature of healthcare. The patient is gaining greater authority in deciding how she is treated. Whether it is a case of choosing her hospital or forming a concordant decision with her doctor on her course of medication, the patient is replacing

the expert as the controlling figure. While this development has been a long time in the making, it is accelerating with the arrival of the internet.

Where the patient previously had access to only a few sources of medical expertise – the experts treating her directly – she can now reach countless sources online. These sources vary greatly in their point of origination across all branches of medicine and alternative therapies, giving the patient access to a much broader collection of medical approaches. However the most significant change is the patient’s new-found ability to meet and speak with other patients online, some of whom might even be suffering from the same condition as she is.

If the patient chooses, she can actively seek medical advice and information rather than have it bestowed upon her. She can even offer advice and support to other patients.

New relationships

Against the backdrop of the changes, this project proposes new types of relationship between the pharmacy and its users. Starting on page 14, a series of design proposals, or ‘potential pharmacies’, illustrate different models of patient-pharmacy interaction and create new expectations for the role of the pharmacy. The proposals are intended to provoke discussion, rather than to predict the future direction of pharmacy.

The inspiration for these proposals has been generously contributed by six pharmacy users who were interviewed as part of this project. These interviews, which are transcribed starting on page 6, provide insights into differing attitudes towards health, medication and expertise.

Interviewees



Alice consults a wide array of medical practitioners, including those that practice alternative therapies which she prefers over traditional medicine and advice.



Imran has walked out of doctor appointments when he felt they were not listening to him adequately. For him, the most important quality in a medical advisor is empathy.



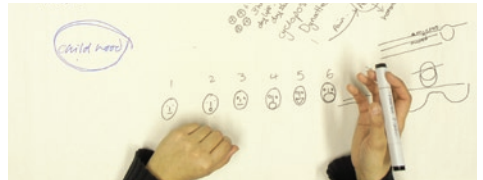
Mark has never taken a day off work due to illness and doesn't take medicine unless it is absolutely necessary.



Steve has recently had some medical problems impinging on his busy life. What most frustrates him are the inefficiencies in the healthcare system.



Viola regularly visits a hospital pharmacy that she describes as being a depressing place. Recent experiences have made her mistrust doctors and she much prefers to speak with fellow patients.



Yasmin is a regular user of the pharmacy. She has suffered from a long-term condition since childhood for which she has taken many different types of medication.

n.b. Names have been changed to preserve anonymity.

The interview process



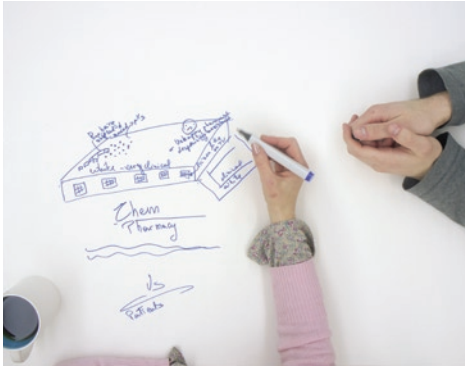
1 Steinberg diagrams

To break the ice, each interview began by discussing four drawings made by the American artist Saul Steinberg (1914–99). Each of these drawings illustrates a conversation between two or more characters. The interviewee was asked which drawings best represented conversations about their health that they had had with healthcare professionals, family members and friends.

By using these drawings as props, the interviewees found it easy to recount stories of, for instance, awkward doctors appointments or their wife's attitude towards alternative medicine.

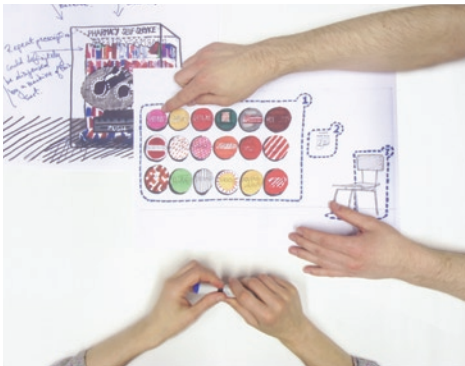
The photo above shows one of the interviewees, Viola (at the bottom of the photo), discussing these Steinberg diagrams with myself (to the right). Each of Steinberg's drawings was introduced with a caption. Starting with the drawing in the bottom left and moving clockwise, these are:

- I'm happy to be told what to do. The pharmacist knows best.
- My lack of choice frustrates me. I want more control.
- I'm responsible for my health. The pharmacist is one of my advisers.
- There's too much information. It gets confusing.



2 Drawing and talking

The interviewee was then asked to make their own drawings as the discussion moved on to their experiences of pharmacy and medication, illness and healthiness, sources of medical advice and many other things. These drawings are reproduced alongside the remarks made by each interviewee starting on page 6.



3 Responding to design proposals

In the final part of the interview, design proposals were shown to the the interviewee who was then invited to respond and to

modify them. Each proposal began a discussion on a particular issue. For example, a proposal for replacing the pharmacist with a medication vending machine raised the issue of automation and its consequences for the pharmacy. Two of these proposals and the accompanying responses are shown starting on page 11.

The use of drawing

All three of these interview techniques utilised drawing in different ways and for different reasons.

Discussing the Steinberg diagrams gave each interview a common point of reference and set the tone of the conversation without prescribing its direction.

Asking the interviewee to draw what they were talking about, no matter how abstract the subject, widened their means of expression and enriched the conversation with illustrations, diagrams and character.

Showing the design proposals as hand-drawn sketches made them feel less precious than if they had been carefully rendered, inviting the interviewee to question and modify them.

Due to the visual nature of this process it was valuable to film each interview. A camera was placed overhead so that it would capture the drawings and gestures of the interviewee, while preserving their anonymity. The camera recorded a visual transcript of the conversation as the drawing developed.

Drawing and talking

The following pages contain an edited transcript of the interviews. Remarks and original drawings made by the interviewees have been grouped into topics and appended with key-questions.

“their expertise isn’t being utilised”

How do you perceive the pharmacist?

Yasmin The only thing I know about pharmacy is that I have to wait quite a long time to get my pills.

A pharmacist for me tend to be somebody who just basically **hands over the drugs**.

I see the doctor as the one that’s treating me, whereas the pharmacist I just see, maybe wrongly, as a dispenser.

Mark The pharmacist should be a bit like a travel agent, in the sense that there are lots of places you could go and you want a bit of informed choice.

I go to a G.P. to say I need some medicine, I’d be happy if the pharmacist decided which one.

Imran I feel that possibly, **their expertise isn’t being utilised** as much as could be.

How could a pharmacy become a more prominent and valued source of expertise?

↓
p21



“the perfect cog”

Steve To be honest, I want to walk in the door, pick up my pills and leave. The pharmacist is like the seamless service provider, the perfect cog. He **hands over the drugs**, I say thanks and that’s that.

Mark If there was a direct supply from the medicine supplier to me then I’d be happy with that.

How could a pharmacy streamline the supply of medication to its customers?

↓
p23

“lots of other brains”

Where do you get your health advice?

Imran I can get knowledge from a whole variety of people, be it my doctor, my wife, YouTube.

This is my wife. She looks a bit stern, but actually that’s quite a good representation of her. If she was a doctor, she’d be brilliant. She has an immense knowledge.

I will ask people at the gym for advice about exercise, nutrition and lifestyle; even advice on how long I need to sleep.

I’m starting to trust the internet a bit more. I didn’t before. I’m not quite sure why that is. I think it’s because my knowledge has increased.

Viola Over the course of a month, while I was waiting for my operation. I ‘Googled’ everything about it that I could think of. I found lots of other disabled people, lots of other brains.

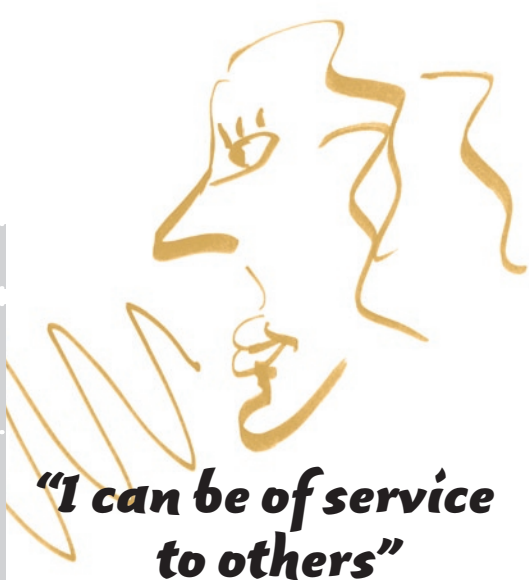
I’ve relied on these people for information. They are self-educated and each person has their own expertise.

I would ask them: do you feel this way? Do you feel cold? Do you feel pain? For how long?

How could a pharmacy recognise the important role of unaccredited health advice?

↓
p17

10



“I can be of service to others”

Mark If I went into my local pharmacy and there was a little notice that said “Would you be willing to deliver medication to someone in your local area?” Too right I would!

Viola If my pharmacist came to me and said “would you like to volunteer to speak to someone with the same condition as you?” I would say yes. I wouldn’t hesitate.

Mark Rather than having drugs trials secretly going on, they could be held openly, so that its easy for those that want to contribute to R&D.

Imran I have to be fit so that, ultimately, I can be of service to others. That’s what we’re all about.

How could a pharmacy foster a community of people who actively support one another?

↓
p18



1/2 Paracetamol instead of 2

~~ILLNESS~~



*ANTIBIOTICS
=EVIL*

“I’ve done my homework”

Who is responsible for your health?

Viola Sometimes you entrust yourself to a medical expert. In a moment of life and death, we rely on them completely. But we should not give up learning how our body works, in terms of illness, healing and pain.

As a patient, I do my research and then relay it to the professionals. I’ve done my homework. I expect them to do theirs.

The experts should help us look after our body and not look after it for us.

How could a pharmacy respond to the expertise that its patients develop?

↓
p24

“I don’t need it”

Mark I never take it unless its absolutely necessary. I’ll always take the **absolute minimal dose**.

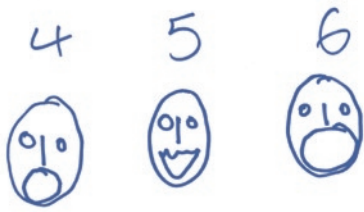
Imran My attitude to medicine is “I don’t need it”. That might be a man-thing.

Viola We’re all waiting for the next wonder-pill, but a pill may not always be the solution.

Alice I stay away from standard Western medicine. I like things that have a five thousand year track record. “New” is not a word that makes my heart beat fast about medicine.

How could a pharmacy provide medication for people who distrust it?

↓
p20



HEALTH IS A JOURNEY ^(TM)

Codine phosphate 30mg



Codine phosphate 15mg

Ibuprofen 400mg

“How do you feel?”

Yasmin How I felt was one of the big things that she still talks to me about today. “How do you feel? Are you all right?” She treats me like a person, rather than someone who is sitting in front of her **moaning for nothing**.

She looked at me and said: “Oh, you’ve obviously got dry lips”. She took the time to give recommendations.

Alice My cranial osteopath, Phil, is amazing. He once said to me: “I really don’t treat symptoms, I treat everything”.

How could a pharmacy treat the whole person rather than just treat their condition?

↓
p19

“not a destination”

Imran The problem is that we live in a society where we need to get well quickly, and we take the short term view to our health rather than the longer term view.

Because you can’t take time off work to be ill. You have to get well as quickly as possible, which basically means taking some antibiotics. I just think that’s disgusting.

The speed at which you can get better on antibiotics is just not right. There seems to be something wrong with that.

Anything quick that makes you better is going to have a downside. Its like taking a short-cut.

Health is a journey, not a destination.

How could a longer-term and more consistent form of pharmacy be practised?

↓
p20



“you need to rely on somebody”

Mark I don't have the time for homeopathy. I prefer something to be done to me straight away.

Viola It was very nice of them to ask my opinion, but there comes a time where you need to rely on somebody. When you're lying there helpless.

How could a pharmacy provide a supportive yet authoritative model of healthcare?

↓
p22

“I want to think that I'm healthy”

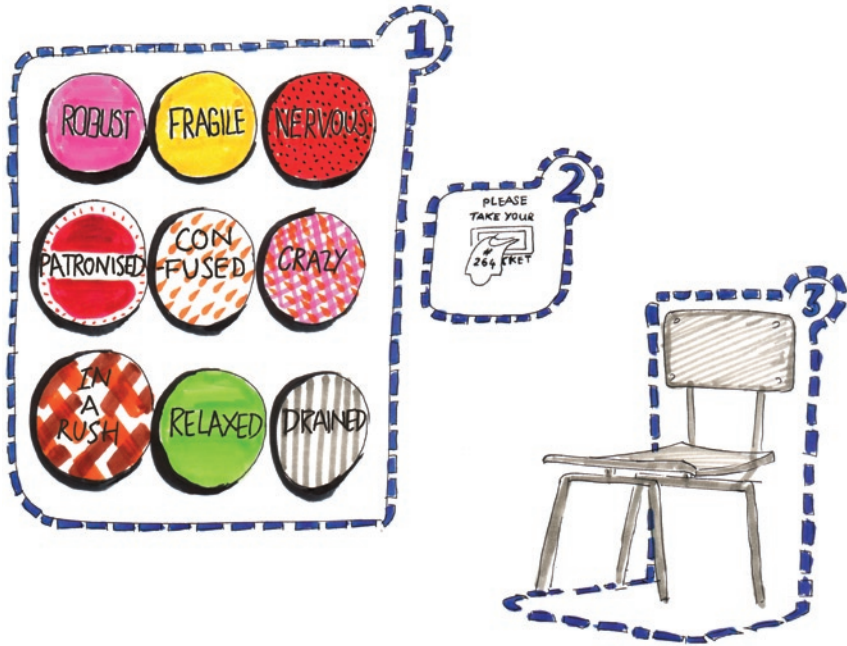
Viola At the end of the day, I want to feel and I want think that I'm healthy. I want to keep positive, rather than constantly communicating the feelings that bring me back to the pain.

How could a pharmacy feel like a healthy place rather than a space where people are ill?

↓
p25

Responding to design proposals

Two of the design proposals discussed during the interviews are shown here, alongside responses from the interviewees.



The mood board

As you walk in to the pharmacy, there is a series of buttons on the wall, each with a label describing various states of mind. You press the button that corresponds to your mood and a ticket is printed with a number indicating your position in the queue. Taking the ticket, you sit down to wait for your appointment.

When you meet the pharmacist they will already be aware of how you are feeling and will be able to treat you accordingly. For example, they could offer extra advice if you feel confused or take extra care with you if you feel fragile.

Mark Great idea!

Alice Good idea because doctors can't or won't take the time to ask patients about their general, overall, feelings.

Viola I'm not sure I would press the buttons. There are certain things that one keeps to oneself. I just want the pharmacist to give me my medicine and be polite!

Yasmin I'd rather just get my drugs and run. I don't want them to care about my emotional state. Pharmacy is not a counselling service!



The personal smoke-ban vending machine

This is a vending machine that dispenses personalised legislation to help you quit smoking. You use the machine to create a contract between yourself and your local pharmacist that legally bans you from smoking. It works in tandem with the technology in your Oyster or national I.D. card so that you can be identified when trying to purchase cigarettes. It's a last resort for people that have tried and failed to give up smoking.



Viola I'm for anything that can help a smoker to quit. But at the same time, a person should take responsibility.

Mark I wouldn't like it if the contract lasted for life. Would it have a time limit on it? I would be happy if it lasted a month or two, but ultimately, I think people should have control over their lives.

Alice I feel that having to face a real person would be better than a machine.

Your **pharmacist** could tell you to come back to face him personally and report if you have smoked since the last visit.

If you fail to quit they'll tell you how **disappointed** they are in you.

Part two

DESIGN PROPOSALS & CONCLUSION

- 17 Open Pharmacy
- 19 Life Pharmacy
- 21 Pro-Scribe Pharmacy
- 23 Self-Health Pharmacy
- 25 Coffee + Pharmacy
- 26 Conclusion

Open Pharmacy

Each branch of Open Pharmacy serves a local community of people who are not referred to as 'patients' or 'customers' but as 'members'. Each member of Open Pharmacy recognises that their personal health forms a small but significant part of the community's health. The idea that there is a strong connection between personal and communal 'circles of health' is the foundation of Open Pharmacy.

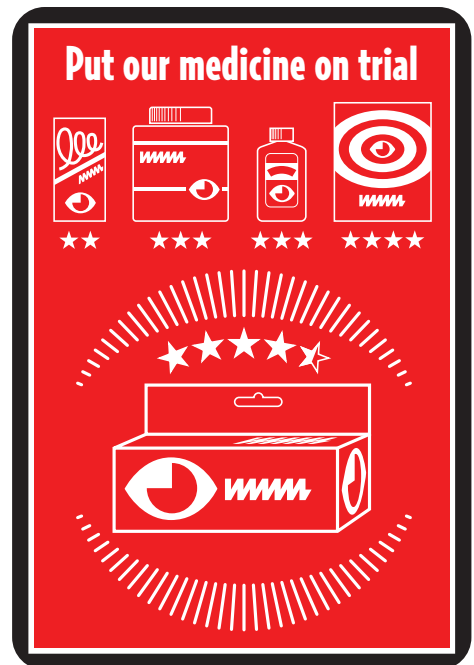
The number of members that each branch of Open Pharmacy serves is prominently displayed. Additional statistics are also sometimes shown; such as the ratio of people in the community who are in good health versus the people who are on medication of some sort. This simple display acts as a barometer of the community's general health.



p10
↓

***"lots of other brains"
How could a pharmacy recognise
the important role of unaccredited
health advice?***

Every item of medication available in Open Pharmacy, including prescription medication, is labelled with a rating of its efficacy. Members who have bought or been prescribed the medication can submit a score on a simple scale from zero to five. These are averaged out to give an overall rating for each medicine, available to all pharmacy members.



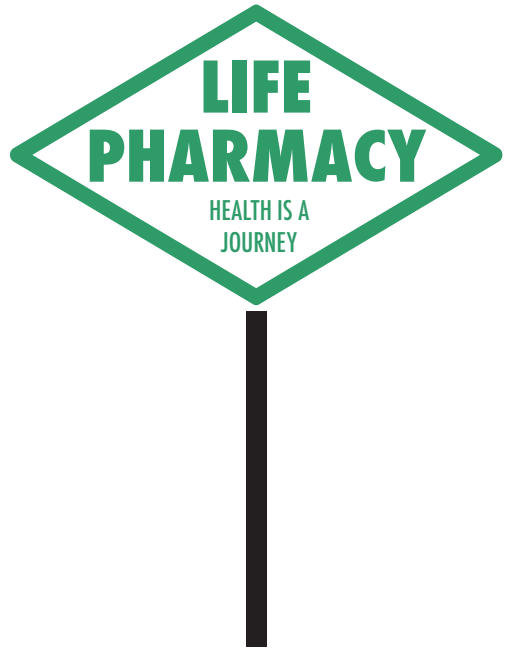
p10
↓

**"I can be of service to others"
How could a pharmacy foster a
community of people who actively
support one another?**

This is an illustration of a typical transaction between the pharmacist and someone collecting their prescription. The pharmacist will often act as a conduit for information passing between the community and the individual.



From time to time, Open Pharmacy will campaign to improve a particular aspect of public health and integrate the message into its advertising. This example is targeted at people suffering from a cold on their daily commute. It encourages them not to infect others.



Life Pharmacy

Life Pharmacy promotes an extremely wide definition of healthcare. Dispensing medication is only a small part of its business. How you are feeling is as important as what medicine you are taking. Contact with Life Pharmacy is sustained and ongoing rather than an intermittent response to illness.

p 12
↓

***“How do you feel?”
How could a pharmacy treat the
whole person rather than just treat
their condition?***

Micro appointments are the everyday means of contact between the patient and the pharmacist, who will start the conversation with the question “how are you feeling?”. Patients understand that a micro-appointment will seldom last more than a minute or two. Any problem requiring a longer discussion means scheduling a Medicine Use Review.



p12



"not a destination"

How could a longer-term and more consistent form of pharmacy be practised?

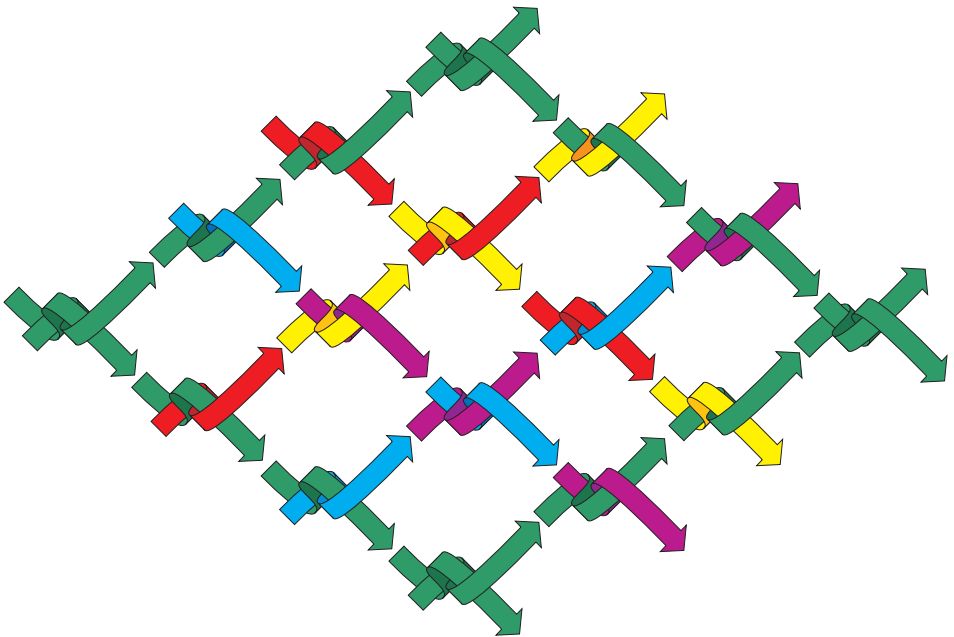
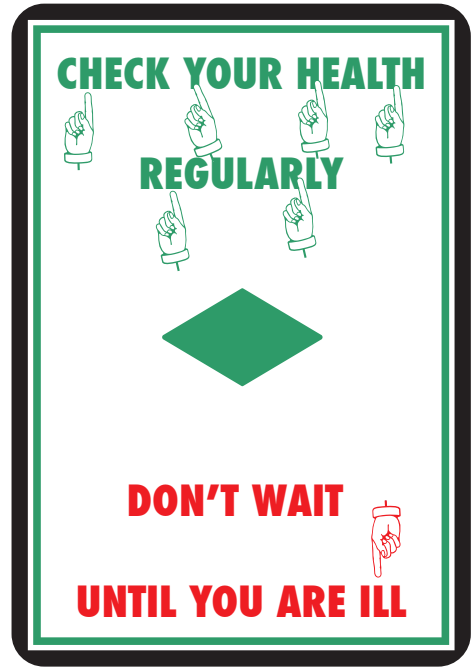
p11



"I don't need it"

How could a pharmacy provide medication for people who distrust it?

Life Pharmacy operates a number of services that balance your medication with your lifestyle. As well as checking for negative interactions between the different medicines a patient is taking they also give advice on the best ways to deal with side effects.





Pro-Scribe Pharmacy

The Pro-Scribe pharmacy is renowned for the no-nonsense advice dished out by its resident pharmacist. The name of the pharmacy refers to the infamous Proscription - a formal (but non-legal) agreement between the pharmacist and the patient, stating that the patient will not undertake activities that will damage their health. The smoking proscription is the most popular.

p9
↓

***“their expertise isn’t being utilised”
How could a pharmacy become a
more prominent and valued source of
expertise?***

Pharmacy requires in-depth knowledge and years of training. The Pro-Scribe pharmacist is a figure of accessible authority who can actively engage and advise on many aspects of personal health. Their credentials are not hidden away, but displayed front of shop to emphasise their expertise and reassure their patients.





p13
↓

***“you need to rely on somebody”
How could a pharmacy provide a
supportive yet authoritative model of
healthcare?***

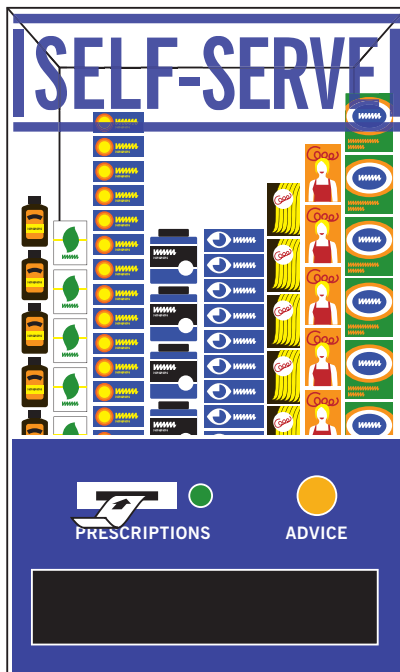
Each pro-scription is an A4 document formalising an agreement between the patient and the pharmacist prohibiting an activity detrimental to the patient’s health. The patient can describe their own specific activity or the pharmacist can recommend one. There is always an expiry date for the pro-scription. It is not for life. The pharmacist agrees to support and advise the patient throughout the ban.

SELF-HEALTH PHARMACY

Self-Health Pharmacy

At the Self-Health pharmacy the patient is their own expert. The pharmacy affords its customers as much autonomy as possible and provides them with information as and when they need it. The pharmacist takes on a role as one of many advisors that the patient can call upon.

MANY ADVISORS
ONE EXPERT:
YOU



p9
↓

“the perfect cog”
How could a pharmacy streamline the supply of medication to its customers?

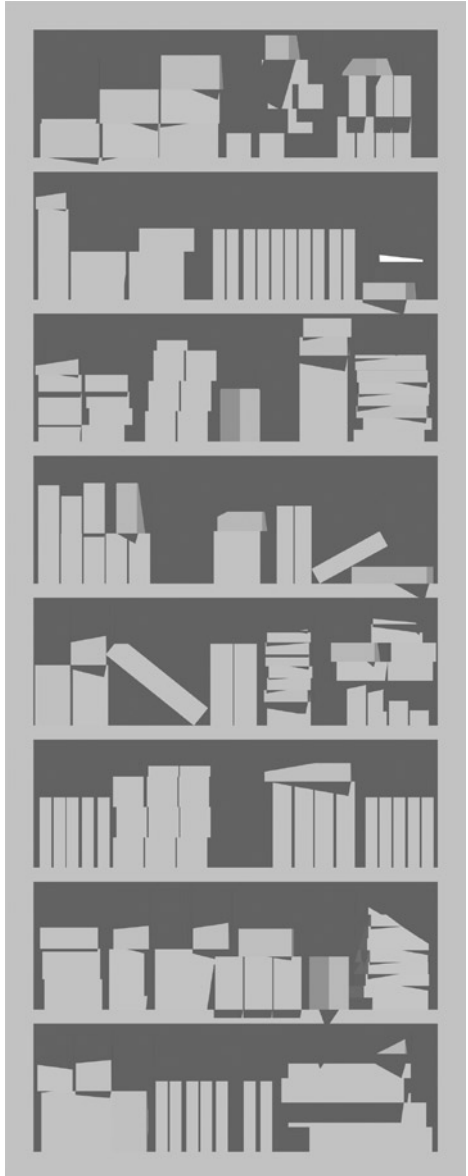
Many of the prescriptions filled by the Self Health Pharmacy are automatically dispensed by machine. Patients access their medicine directly and efficiently by feeding their prescription into the machine. Non-prescription drugs can also be purchased with a credit card.

DIY TESTS

p11
↓

***“I’ve done my homework”
How could a pharmacy respond
to the expertise that its patients
develop?***

The Self Health Pharmacy offers an extensive range of home kits that test for everything from Aids to zinc deficiency. The pharmacist actively encourages people to use these tests because it helps to build personal health awareness for the individual without compromising their control. The pharmacist remains as a subsequent source of advice.



COFFEE

+ Pharmacy

Coffee + Pharmacy

This hybrid shop is not a pharmacy that happens to serve coffee. Rather, it is a fully-fledged coffee shop with a pharmacy en-suite. Coffee + Pharmacy practices a form of “undercover healthcare” for people that have an aversion to the constant reminders that they are ill (particularly those who are suffering from a long-term illness).

p13
↓

***“I want to think that I’m healthy”
How could a pharmacy feel like a
healthy place rather than a space
where people are ill?***

The shop provides all the services of a normal pharmacy, but much of this happens behind the scenes. The 20 minute wait for a prescription to be dispensed can be enjoyed while reading the paper and sipping a latté.

1



Deposit your
prescription

2



Order
a drink

3



Relax for
20 minutes

4



Collect your
medication

Conclusion

The role of the pharmacist

According to the pharmacy users interviewed as part of this project, their perception of today's pharmacist is of someone that simply "hands over the drugs" (see page 6). This is an inaccurate description of the expertise that a pharmacist employs behind the scenes but it does indicate that, in most cases, the interaction between the patient and the pharmacist boils down to the simplest of transactions.

The design proposals cast the pharmacist in a richer, more expressive set of roles. At Open Pharmacy the pharmacist is part facilitator: filtering and passing information between the community members, in response to the more active role that patients have. The Pro-Scribe pharmacist is a paternal figure with an air of authority, acknowledging a need for simple unequivocal advice in a world with many competing sources of medical information.

The role of the patient

Although a consistent stereotype of the pharmacist emerged from the interviews, the same could not be said of the interviewees themselves. Each expressed a different set of attitudes towards healthcare. For this reason, five different pharmacy proposals were developed, rather than one.

The patient that visits the Self-Health Pharmacy has taken responsibility for their own health, deciding when they need advice and when they just want efficient access to their medication. A member of Open Pharmacy, however, is not as independent and takes an active interest in the health of those around them. While both of these patients will develop some expertise in

their condition, this is not the case with the Pro-Scribe pharmacy patient who defers responsibility to the pharmacist.

The scope of the relationship

When the interviewees were asked to respond to the Mood Board design proposal (see page 11) opinion was divided on whether or not the pharmacist should take an interest in the patient's general state of mind. Mark and Alice both thought that it was a good idea, whereas Viola and Yasmin were more-or-less horrified by the prospect: "Pharmacy is not a counselling service!". This highlights a key question in the patient-pharmacy relationship. Should it be limited to medicine, or could it cover other factors of peoples health.

The Pro-Scribe patient-pharmacy relationship has a wider scope as it addresses the patient's personal behaviour and their unhealthy habits. The Life Pharmacy relationship is similarly pervasive, including the patient's well-being and persisting beyond the brief time spent by the patient in the pharmacy.

The first four pharmacies each propose to extend the patient-pharmacy relationship. However, the fifth proposal does the opposite. In Coffee + Pharmacy, the relationship hardly exists at all, with the pharmacist remaining entirely behind the scenes.

This project poses key questions and offers a set of directions. It provides a frame through which to view the issues that are shaping the future of the pharmacy and illustrates them with drawings and design proposals. These can be used in further discussion with pharmacy users and to help define a strategy for developing the role of the pharmacy.

Research partners

Lloydspharmacy is the UK's largest community pharmacy operator providing medicines, services and health advice throughout the UK. It has over 1,600 pharmacies nationwide, delivering services to 2 million people a week. Lloydspharmacy is owned by **Celesio**, a European healthcare company based in Stuttgart. Celesio owns pharmacies in seven European countries, the majority of which are located in the UK.

- www.lloydspharmacy.co.uk
- www.celesio.com

The **Helen Hamlyn Centre** at the Royal College of Art is a multi-disciplinary centre for inclusive design. Its programme looks at how a socially inclusive and human-centred approach to design can support independent living for ageing and diverse populations, improved standards of healthcare and patient safety, and innovation for business.

- www.hhrc.rca.ac.uk

Design Interactions is a department of the Royal College of Art that seeks fresh approaches to interaction design by examining the social, cultural and ethical consequences of emerging technologies and asking probing questions through design.

- www.interaction.rca.ac.uk

Research Associate **James King** studied graphic design at Central Saint Martins (where he now teaches) and then went on to graduate from Design Interactions at the RCA. Currently, he is developing a practise that seeks to integrate futures research with design. The *Potential Pharmacies* project has provided him with a great opportunity to apply this way of working.

- www.james-king.net
- mail@james-king.net

Acknowledgements

James King would like to thank the following people for their help and support: Andy Murdock, Tim Hunter, Sandra Mosey and Sarah Vice at Lloydspharmacy; Rama Gheerawo, Jeremy Myerson and Atsue Takeoka at the Helen Hamlyn Centre; Tony Dunne and Brendan Walker at the Design Interactions department; Michele Gauler at Beta Tank; Philippa Morrice; Jack Schulze at Schulze & Webb and Jennifer Wong at the Dana Centre.

The following people kindly lent their expertise to the project: Rosanella di Costanzo; Susan Griggs; Joanne Hippolyte at London Associates; Shaun Hutchinson; Suzann Kundi; Lynne Maher at the NHS Institute for Innovation and Improvement; Rob Marshall; Darragh Murphy and Rosie Weston at St. Mary's Hospital; Mike Rubenstein at Quay Pharmaceuticals; Joanne Shaw and Judy Willets at Ask About Medicines and Waqar Siraj.

The following pharmacists at Lloydspharmacy kindly agreed to be observed while at work: Farhen Moulana, Chandru Rupatel and Kishori Shah.

Selected references

- Hilary Cottam, Charles Leadbeater, 2004. *RED paper 01: Health: co-creating services*, London: Design Council
- Joanne Shaw, Richard Seal, Mark Pilling, 2002. *Room for review: a guide to medication review*, London: Medicines Partnership
- Saul Steinberg, 1960. *The labyrinth*, New York: Harper & Brothers
- Indri Tulusana, 2004. *Circles of care: a new approach to healthcare based on social networks*, London: Helen Hamlyn Centre