



## The CC Starter Kit

The CC Starter Kit is an organiser of medication and information for newly diagnosed Crohn's disease patients. It also helps those who have lived with the condition for longer comply with their treatment regime.

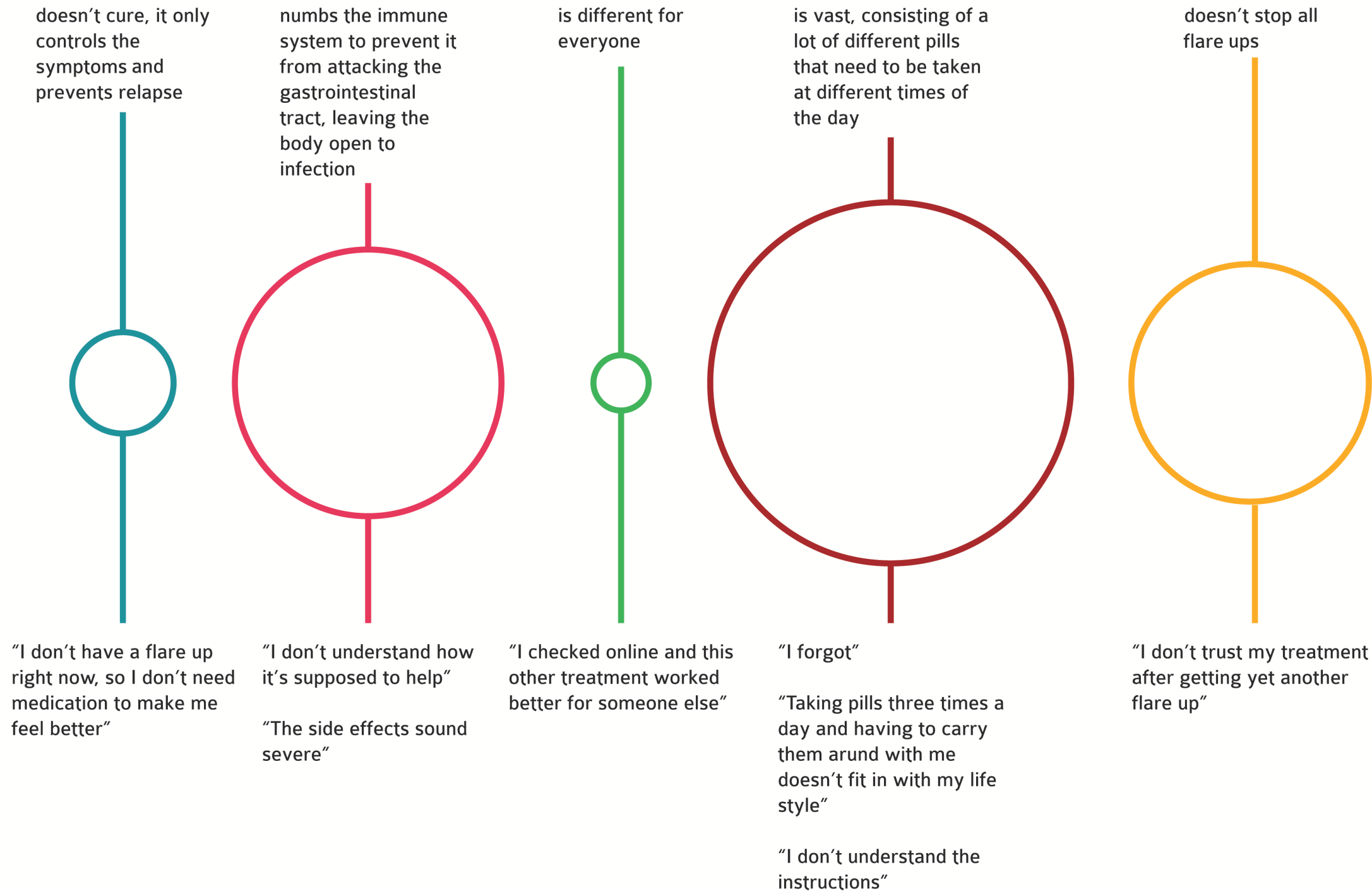
Crohn's disease manifests itself by making a patient's own immune system attack a part of their gastrointestinal tract. It is usually diagnosed in people in their early 20s or younger. The treatment regime, which lowers the body's immunity to prevent further attacks, only controls the symptoms, is complex, and doesn't stop all flare-ups. This leads to patients abandoning it for different reasons: some of them will not understand how medication helps them and will be afraid of the side effects, some will think that if they are not experiencing any symptoms at a particular moment, they don't need the treatment, and others will find it too difficult to sort through the different blister packs and find the pills they need to take.

My initial research was based on one case study of an extremely compliant patient, how he took his medicine, how he stored and transported it, how he accommodated the treatment into his daily routine and lifestyle, and how he kept himself motivated despite flare ups. Together, we realised that a quick initial diagnosis, good relationships with medical staff, and a clear understanding of the fact that Crohn's is part of his life now were the reasons why he continued his treatment. During these interviews I gained insights into how he made the treatment more effective and bearable – i.e. by swallowing drugs that leave a bitter aftertaste before chewable ones, which reduce the bitterness.

Drawing on his experiences and in consultation with other members of the National Association for Colitis and Crohn's Norfolk group (NACC), I developed a product that promotes medication compliance by helping to organise medication and reminders. It first took the shape of a magnetic board with attachments, consisting of storage containers, leaflets with information about the treatment, side effects and useful techniques, plus a chart detailing which drugs need to be taken when. Through the need for a sturdier structure, portability and, ideally, a way to disguise the contents, it evolved into a plastic container, either wall-mounted or freestanding, holding the same components, this time in a fixed configuration, covered with a photo frame lid to conceal its contents.

# Noncompliance research

## The treatment for Crohn's disease



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## The design solution

talks directly to those who have been recently diagnosed, teenagers and people in their early 20s, to manage their expectations and prepare them

offers clear information on what each part of the treatment does and possible side effects

contains information about when each pill needs to be taken in the form of a reminder chart

"fits in"

# Design development

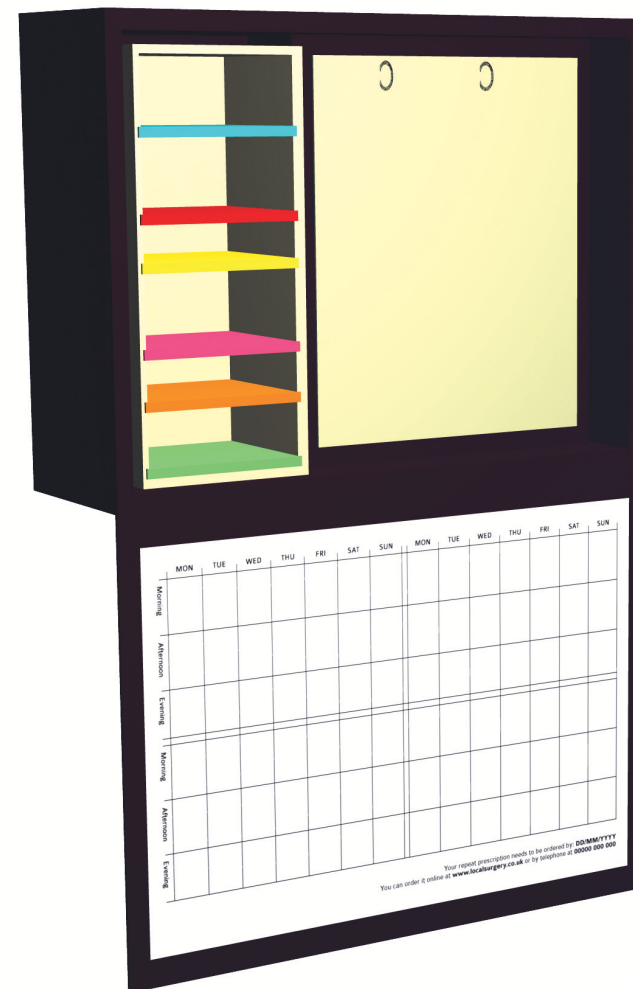
The CC Starter Kit was designed in collaboration with members of the National Association for Colitis and Crohn's. The initial design concept was shown to Crohn's patients who provided feedback which was then taken into account for the next versions.

Stage 1



"Would I have to pull open a drawer every time I take my pills out? That seems like a lot of effort."

Stage 2



"Shelves are better, but can I move them around? I'll need more space for some blister packs than for others."

"If the door with the ring binder clams is that colour, can I also use it as a whiteboard?"

Stage 3

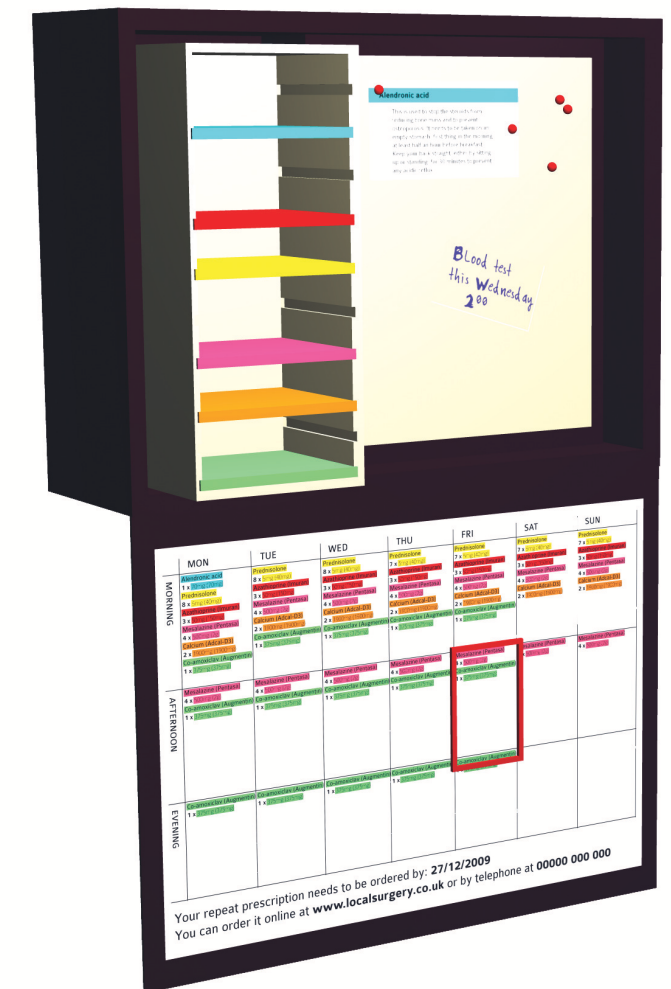


"I find ring binders really difficult to use. Can I get magnets to hold the leaflets in place instead?"

"In the chart, I can't see the number of pills I need to take very well."

"Can the repeat prescription information be a bit bigger?"

Stage 4



"Can I remove the whole unit of shelves and take it with me when I travel?"

"Is there something on the chart that will let me know I've taken a certain of pills already?"

# The CC Starter Kit in use

**Lightweight plastic box** is attached to a wall in the patient's kitchen



**Weekly medicine reminder chart** contains a magnet that slides across its surface, marking the next dose the patient needs to take

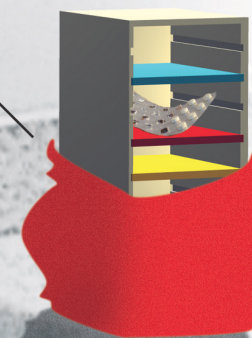


**Photo frame on the outside of the lid** conceals the contents and purpose of the box

**Magnetic white board** opens up to reveal a container for pill boxes



**Unit of shelves** can be removed and carried in its own fold out bag



**The CC Starter Kit consists of:**

## 1. Box

- is made out of lightweight plastic
- uses vivid colours to appeal to young people
- is 32cm x 23cm x 16cm, a good size for a chart printed on an A4 page to fit into the lid and for blister packs to go on the shelves
- can be attached to a wall with screws or stood on a table

## 2. Photo frame on the outside of the lid

- hides the contents of the box when the lid is closed
- disguises the box as something other than a medicine cabinet

## 3. Unit of shelves for storing and transporting blister packs

- contains shelves that can be moved up, down or removed entirely
- is colour coded for different types of drugs
- uses the same colours as the medicine reminder chart
- can be removed from the box and transported in the bag that folds out from underneath it

## 4. Magnetic white board

- can be used to attach leaflets to it and to write on
- the leaflets contain information about the different drugs, what they do to improve symptoms, possible side effects and techniques that other patients have found useful, information that is usually given orally by pharmacists

I. they can be colour coded like the shelves

II. ideally, they'd come from the pharmacy or doctor the first time the patient needs to take a new drug but they can also be made available by groups such as the NACC

## 5. Container for pill boxes and other things that need long term storage

- is placed behind the white board

## 6. Weekly medicine reminder chart on the inside of the lid

- should be provided by the pharmacy along with the repeat prescription; if this is too difficult to implement, a spreadsheet can be distributed with the Kit that patients would have to fill in themselves
- fits in a transparent sheet on the inside of the lid when printed on an A4 page
- is colour coded in the same way as the shelves
- a rectangular magnet slides across it to mark where in the chart the patient is at the moment
- contains details about the next repeat prescription