



## Bridging the Gap

Integrated Referrals to Community Pharmacy  
on Discharge from Hospital

## Implementation Support Pack

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***Please note the external links on page 17. These provide access to substantial additional information.***

# Introduction

There is a significant and increasing body of evidence to demonstrate that referring patients on discharge from hospital to their nominated community pharmacist can:

- lead to significantly better outcomes for patients; and
- save the health care system substantial amounts of money.

Pinnacle Health's PharmOutcomes system makes this a simple and straightforward real-time process and this paper provides background information on how to achieve this.

## Overall Aims

People who take medicines for long term conditions often have changes made to their usual prescription during a stay in hospital. Evidence shows that problems with medicines can arise during clinical handover from secondary care to primary care<sup>1</sup>. This can sometimes be the cause of patients being readmitted. Community pharmacy can help address this problem if they have accurate and timely information.

The overall aims of hospital referrals to community pharmacy on discharge are therefore:

- to improve patient care through the better provision of information to community pharmacy;
- to improve patient care through the subsequent provision of follow-up information to GPs, referrers and others as appropriate; and
- to generate efficiency savings for Hospital Trusts and CCGs, primarily through a reduction in the number of avoidable bed days.

It is worth noting that community pharmacies do not benefit financially from this approach. They are limited for payment purposes to providing 400 medicine use reviews (MURs) each year and there is no additional funding for exceeding this number. The majority of community pharmacies are already providing or exceeding this number of MURs.

Evidence from implementations elsewhere, however, shows that the transfer of information to community pharmacies enables them to target these MURs more usefully and many pharmacies report significant improvements in their ability to provide higher quality care as a result of discharge information provided.

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<sup>1</sup> Audit published by the NHS Specialist Pharmacy Service in August 2016, updated July 2017:  
[https://www.sps.nhs.uk/wp-content/uploads/2015/11/Medicines\\_Reconciliation\\_Collaborative\\_Audit\\_Report.pdf](https://www.sps.nhs.uk/wp-content/uploads/2015/11/Medicines_Reconciliation_Collaborative_Audit_Report.pdf)

# Implementation Choices

There are three methods of implementing information transfer using PharmOutcomes.

<b>Full electronic integration</b>	The only additional work for pharmacists required at the referrer end is the input of choice of receiving pharmacy. All other information is picked up electronically from existing data held within the hospital systems when discharge notifications are generated.
<b>Partial electronic integration</b>	This approach pulls some information (typically demographic and medicines data) from the hospital PAS system and feeds it electronically into a PharmOutcomes template. Other information, for example action required, is then entered manually into the PharmOutcomes record using a web browser.
<b>Manual data entry via web portal</b>	This solution uses a web based interface. Referring pharmacists enter basic demographic information and other data as required via a web browser and the data is passed to community pharmacy. The solution is suitable for those trusts where prescribing information is currently recorded in paper systems.

Regardless of the type of solution, the same information can be supplied to community pharmacy.

In some instances of partial integration or manual data entry, this may be in the form of pdf attachments rather than electronically structured data. This is determined by local referrer practices.

## Costs

There are two sets of costs associated with implementing the electronic transfer of information to community pharmacy, the referrer end and the community pharmacy end:

<b>Referrer end</b>	<p>The licence cost for all solutions is £3,995 + VAT for the first system integration for an NHS Trust hospital site to cover a follow-up footprint of up to 1,000 community pharmacies.</p> <p>If an NHS Trust operates as a Partnership Trust and has an additional site managed by the same IT team, then adding a second referring system is a reduced £995 + VAT to cover a follow-up footprint of up to 1,000 community pharmacies.</p>
<b>Community pharmacy end</b>	<p>Community pharmacies need access to the PharmOutcomes system in order to be able to follow-up on referrals. PharmOutcomes is actively used in around 82% of community pharmacies in the country and will therefore be able to accept referrals at no additional cost in most instances. Where this is not the case, we can provide a quote for the remaining pharmacies based on the hospital's usual footprint.</p>

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# Efficiency Savings

In addition to improving outcomes for patients, one of the key drivers for referrals to community pharmacy on discharge is to deliver financial savings for Trusts and CCGs by reducing the number of avoidable bed stays. Although these could be realised as cash releasing savings, in practice it is more likely that the available bed days released will be used in the form of additional capacity which would otherwise not be available.

The expectation for the savings is derived from an independent study carried out by Durham University on two Newcastle hospitals using PharmOutcomes and published by in the BMJOpen.<sup>2</sup>

In the Newcastle implementation, hospitals referred a limited selection of patients (those on multiple medications) to community pharmacies on discharge. Of these, 36% were followed up by pharmacies. Even with this limited level of follow-up, it was estimated that follow-up activity such as medicine use reviews led to savings of:

- £623,115 pa for the hospital trust
- £734,801 pa for the CCG

These savings derive from current funding models which require Trusts to pick up the costs of readmissions within thirty days and the CCG to pick up the cost of readmissions between thirty and ninety days.

Recent data demonstrates that the follow-up rates for referrals passed to community pharmacy for Newcastle and elsewhere are now in excess of 70%. This suggests that the above savings, based on referrals of 1,386 patients over the course of the initiative, are likely to be understated.

In preparing to implement e-referrals in the North West in 2017, NHS England North West and the North West Academic Health Science Network calculated on the basis of the study that each targeted referral to community pharmacy can lead to 0.8 bed days saved. This figure has not been independently verified to date but may be useful in enabling Trusts and CCGs to make an estimate of likely savings in bed day costs using this figure and current discharge rates.

## ADDITIONAL OPTIONS

We have developed two additional forms of messaging at the request of Trusts which we can implement once the base solution is in place. These cost £995 each + VAT and are entirely optional:

- The first is a 'for information only' notification to the patient's nominated pharmacist, advising that their patient is being discharged but **not** requesting any follow-up actions.
- The second is a notification when a patient is admitted to hospital, advising the community pharmacist that their patient has been admitted and requesting them to cease the community supply of medicines and services.

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<sup>2</sup> Nazar et al, <http://bmjopen.bmj.com/content/6/10/e012532.full>

# Implementation Process

There are a number of stages that need to be followed once a Trust has committed to implementing the PharmOutcomes solution.

<b>Determine and confirm the method of implementing</b>	This will usually be full electronic integration if the information is currently available in electronic format and the hospital is already sending electronic discharge information to GPs.	<b>Trust</b>
<b>Determine the patient sets to be included.</b>	The Trust will need to decide whether to refer all or selected discharges to community pharmacy. Some Trusts have indicated they would like to start with a particular subset of patients. Others have indicated they would like to notify all discharges. This choice will need to be reflected in the relevant Standard Operating Procedure.	<b>Trust</b>
<b>Determine the information to be provided to patients</b>	It is useful to provide patients with written information on how the information transfer service will work. An example from South West AHSN is included as appendix 1.	<b>Trust</b>
<b>Determine the information that the Trust would like to send to community pharmacies</b>	<p>This involves deciding what information to pass across at the point of discharge. It can be restricted to simple demographic data or it can include full information around medicine use, allergies and other clinically relevant data with notes and attachments.</p> <p>PharmOutcomes can transfer whatever information is agreed at the outset of initiative.</p>	<b>Trust</b>
<b>Determine the IT requirements and agree a timescale for implementation and sign off</b>	The only IT requirement for the manual solution is for the hospital user to have access to a web browser. Integrated solutions require local IT support but this is typically only a couple of days work and we provide detailed support.	<b>Trust with support from Pinnacle</b>
<b>Determine the information governance requirements and agree a timescale for clarification and sign-off</b>	There are information governance requirements around the sharing of information and consent which need to be considered locally. An Impact Assessment may be needed and we have included a link at the end of this document to an example assessment.	<b>Trust with support from Pinnacle</b>

<b>Develop and test message transport processes</b>	<p>For manual and partial solutions, this involves customising and testing the web interface to meet local needs. We would do this with you and it would take round a couple of hours.</p> <p>For fully integrated and partial solutions this involves developing and testing the mapping of data fields to the transport mechanism. We provide detailed technical specifications and support for your IT team and in practice this is generally very straightforward.</p>	<b>Trust / Pinnacle</b>
<b>Develop a standard operating procedure and the behaviour changes required.</b>	This involves developing a standard operating procedure which meets local requirements, fits with local information governance and consent practice and is aligned to the technical solution to be implemented.	<b>Trust</b>
<b>Ensure expected success measures are defined and mechanisms are in place to capture base data and data following implementation.</b>	This is an optional part of the process but we recommend it so that you can assess the clinical and financial benefits of the approach.	<b>Trust / AHSN</b>
<b>Train staff</b>	Develop and deliver appropriate training	<b>Trust</b>
<b>Communicate with and train community pharmacists</b>	Develop and deliver appropriate communication and training	<b>AHSN / Trust</b>

As part of the process, we normally suggest that each stage is formally signed-off by the Trust to their satisfaction.

Formal sign-off by IT lead		Trust
Formal sign-off by IG lead		Trust
Formal sign-off of data to be provided		Trust
Formal sign-off of Standard Operating Procedure		Trust
Formal sign-off to go live		Trust
Formal sign-off of acceptance		Trust



# Determining the Information to Send

Trusts will need to decide locally which information they want to pass across to community pharmacies. This can be tailored Trust by Trust and site by site.

This can most easily be done by identifying relevant data fields in current IT systems. The following screenshots from PharmOutcomes 'virtual hospital' PAS emulator may be useful in thinking about this process. An example in PharmOutcomes format is included in Appendix 3.

APAT - Admit Patient

Patient: Dale Cooper

Hospital No.: National No.: 9434785919 Date of Birth: 1954-04-19

Admission Ward: Hinton Ward

Admit Date/Time: 24-08-2017 13:40

Admit Reason:

Consultant: DIANNE, Ms Dianne

Patient Type: NHS Adult Patient

Spell Number:

Episode Number:

Admission Type: ☒ Planned ☐ Emergency

Buttons: Select Patient, Patient Details, Admit, Cancel Admission, Cancel, Close, Help

Relevant details from here might include:

- patient forename
- patient surname
- date of birth
- NHS number
- Ward
- Consultant
- Admission type

PATALGY - Patient Allergy Maintenance

Patient: Dale Cooper

Record Status: ☐ No Known Drug Allergies ☐ Drug Allergy Status Undetermined ☒ Allergy ☐ Sensitivity

Search: Allergen: Reaction: Add

Allergies:

Allergy Description	Reaction
clarithromycin	Shortness of breath
gabapentin	Pruritis
FACTOR IX	Acute Kidney Injury

Sensitivities:

Sensitising Agent	Reaction
fenbufen	Blurred Vision
acenocoumarol	Fever/Flu-like symptoms
ibandronic acid	Bleeding
GELATIN AND GELATIN DERIVATIVES	Malignant Hyperthermia

Buttons: Allergy / Sensitivity History, Other Allergy Maintenance, Remove Allergy, Save, Close, Help

Relevant details from here might include:

- allergy description
- nature of allergy reaction
- sensitising agent
- nature of reaction to sensitising agent

Status	Drug Name	Dose	Frequency	Route	BNP
	ATORVASTATIN 40 mg Tablets	40 mg	1X1 ON - ONCE a DAY at NIGH oral	oral	Cardiovascular system
	FERROUS SULPHATE 200 mg Tablets	200 mg	3X1 AM/LUPM - THREE times a oral	oral	Nutrition and blood
	HYDROMELLOSE 0.3 % w/v Eye Drops	1 Drop(s)	WHEN REQ - When required if affected eye(s)	oral	Eye
	LEVOTHYROXINE 100 micrograms Tablets	100 microgram	1X1 AM - ONCE a DAY in the 1 oral	oral	Endocrine system
	LEVOTHYROXINE 25 micrograms Tablets	25 microgram	1X1 AM - ONCE a DAY in the 1 oral	oral	Endocrine system
	LEVOTHYROXINE 50 micrograms Tablets	50 microgram	1X1 AM - ONCE a DAY in the 1 oral	oral	Endocrine system

Relevant details from here might include:

- drug name
- dose
- frequency
- route
- continuation

Diagnoses	Discharge time/date	Transferred Notes
	Note to Comm. Pharm.	Destination Comm. Pharm. Code:

Relevant details from here might include:

- referral destination
- note to community pharmacy

The discharge information will need to include the organisational (ODS) code for the relevant community pharmacy so that the information can be directed to the correct destination.

This is recorded using a dedicated text field within the hospital system. If a dedicated field is not available, then it has been implemented by using a Regular Expression search within another free-text field. Other implementations have used a bespoke drug name to trigger referral.

Pinnacle will provide a bespoke browser based link as part of the implementation which enables staff to easily look up relevant pharmacy ODS codes where necessary. We also offer an API which can provide the list of available pharmacies in machine-readable format.

# Determining which Patients to Include

In previous implementations, some Trusts have indicated that they would like to implement referrals on discharge by referring a particular subset of patients, for example, patients with multiple and complex medicine requirements or patients with mental health and particular physical health conditions).

Others have indicated they would like to notify all discharges and have undertaken to resource departments appropriately to achieve patient consent for this.

Alternatively, Trusts may wish to start off by referring patients from particular wards or on a randomised or risk management basis.

Once the preferred approach is determined locally this will need to be reflected in the relevant Standard Operating Procedure.

# Technology Considerations

## Web Version

There is no technical work required to use the web version of PharmOutcomes. We will simply provide a nominated person with system log-in details and administration rights and help with basic user configuration. Referrals to community pharmacy can begin as soon as training and set-up has been completed.

## Full or Partial Electronic Integration

It is not possible to predefine the technical work required here as this varies by PAS and Dispensing System, message brokering system, security mechanisms and other factors. Experience elsewhere however has indicated that allowing 2-3 days at the Trust end for understanding, implementing and testing the messaging process is a realistic expectation of workload.

We recommend that Trusts requiring full or partial electronic integration send the following information to our interoperability support service at [itk.support@phpartnership.com](mailto:itk.support@phpartnership.com) or the team can also be contacted by telephone on 01983 216 699.

- Trust Details
  - Trust and hospital name
  - Names and contacts for both clinical lead and technical lead (email and phone)
- Local System Details
  - Current PAS system and version
  - Current dispensing system and version
  - How are you currently sending discharge information electronically to GPs
- Technical Information (if available)
  - What message engine is currently in use at the Trust?
  - What message type is sent (e.g. HL7v2, ITK CDA payload)?
  - What fields are available to record the destination?

The Pinnacle team will then share the appropriate technical specifications for linking with your specific system and advise on the work required to enable integration and testing.

We provide a human readable technical check on the messages you produce which is freely accessible at <https://hl7.pharmoutcomes.org/hl7/check>. Once the necessary technical work has been carried out, we will test the process with you end to end by transmitting and receiving test messages. Once test messages have been successfully received and processed, the Trust will be able to go live immediately.

Once live, electronic notifications to Community Pharmacy will happen at the same time as the Trust sends discharge notifications elsewhere.

# Governance Considerations

There are a number of information governance considerations which need to be taken into account in transmitting information across to Community Pharmacies.

As part of implementing referrals on discharge elsewhere, we have provided evidence and assurance on many occasions that we meet legislative and best practice requirements to enable us to manage this process safely. This evidence has been tested and accepted by Trusts, NHS area teams and Academic Health Service Networks. We can provide references for this upon request.

Individual Trusts are however welcome to speak to Pam Bowes, our Data Protection Officer & Governance Lead if you have any queries. Pam can be contacted at [pam.bowes@phpartnership.com](mailto:pam.bowes@phpartnership.com) or on 01983 216 699.

## Frequently Asked Governance Questions

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<b>What governance arrangements does Pinnacle Health have in place?</b>	<ul style="list-style-type: none"><li>• We work within a relevant independently assessed ISO 27001:2013 assurance system.</li><li>• We have NHS IG Toolkit Level 3 certification</li><li>• We operate systems in multiple, secure, hardened, data sites.</li><li>• We actively manage system and network capacity and performance.</li><li>• We arrange independent security and penetration testing annually and in the event of material infrastructure changes.</li><li>• We are accredited as fully compliant to the Cyber Essentials + standard</li><li>• We store, process and transmit all data entirely within the UK.</li><li>• We encrypt all data.</li><li>• We train and update all staff on information governance, usually monthly and at least quarterly.</li><li>• We carry out business continuity tests quarterly.</li><li>• We carry out regular privacy impact assessments.</li><li>• We actively monitor information governance at board meetings at company Board Meetings each month.</li></ul> <p>Our <b>Information Governance and Technical Specification</b> provides a summary of the PharmOutcomes system and the supporting infrastructure. The document is available upon request from our <a href="#"><i>IG lead</i></a>.</p>
<b>How does Pinnacle comply with the EU GDPR?</b>	<p>We have a qualified GDPR practitioner (Pam Bowes) as our governance lead. Pam is one of the partners of the company and champions GDPR and information governance at Board level. We already had strong governance controls in place but have updated processes, documentation, contracts and agreements as necessary to ensure that we comply fully with the legislation and current practice guidelines from the Information Commissioner's Office.</p>

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<b>Who are the data controllers</b>	<p>In the case of hospital discharge referrals, there are potentially three data controllers under the legislation:</p> <ul style="list-style-type: none"> <li>• hospital trusts who decide what data is to be provided,</li> <li>• community pharmacists who carry out follow up activity,</li> <li>• in some instances, clinical care commissioners may also be involved.</li> </ul> <p>We act as a data processor on behalf of the data controllers.</p>
<b>Is a data sharing agreement required with Pinnacle?</b>	<p>No. Under the GDPR legislation data sharing agreements are only needed between Data Controllers who wish to share information with each other.</p> <p>We serve the role of Data Processor so the agreement required is a Data Processing Agreement (and not a data sharing agreement). Our contracts contain a data processing agreement which includes the elements required by GDPR as well as our standard licence agreement terms.</p> <p>It may be useful to know that in view of the number of organisations asking us to sign data sharing agreements, we spoke directly to the Information Commissioner’s Office on this matter in May 2018. They confirmed that our understanding of this matter is correct. We can provide a steer to relevant ICO guidance on this if required.</p>
<b>Is a data sharing agreement required between the Trust and the pharmacies?</b>	<p>The NHS England Data Sharing Policy states that the requirement for a Data Sharing Agreement between two parties is set aside if the two parties are both at least NHS Information Governance Toolkit Level 2. Community pharmacies are required to meet this standard for their annual contractual framework check by NHS England.</p> <p>The Information Sharing Policy is at: <a href="https://www.england.nhs.uk/wp-content/uploads/2016/12/information-sharing-policy-v2-1.pdf">https://www.england.nhs.uk/wp-content/uploads/2016/12/information-sharing-policy-v2-1.pdf</a></p> <p>Para 5.4, states that <i>requirement 207 of the IG toolkit specifies that “organisations that are achieving an adequate level of performance (i.e. attainment level 2 or above) against the NHS Operating Framework key IGT requirements can be regarded as ‘trusted organisations’ for information sharing purposes where the purpose of sharing is the delivery of care.</i></p>
<b>How does Pinnacle comply with data retention obligations and Goddard?</b>	<p>We comply fully with relevant legislation and NHS data retention requirements.</p> <p>The Goddard enquiry stated that any records which may be required as part of a sexual abuse case should not be deleted until the enquiry is completed. This includes health records and we are compliant with this requirement.</p>

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<b>Can commissioners see referral and follow-up information?</b>	Commissioners can see referral and follow up information in anonymised or pseudo-anonymised format as appropriate. Commissioners can only see patient identifiable information under very specific conditions with full governance and access controls to named individuals on signed explanation and declaration.
<b>Do Trusts need to do a privacy impact assessment?</b>	<p>Trusts will need to be confident that patients have given appropriate consent for information to be passed to community pharmacy on discharge before doing so unless relying on healthcare legislation which allows this to be done in the patient's best interest.</p> <p>Processes for obtaining consent for sharing information at the community pharmacy end are built in to the PharmOutcomes system.</p> <p>The linked Privacy Impact Assessment at the end of the document is pre-populated with relevant PharmOutcomes information and embedded evidence documentation.</p>
<b>Can we arrange for other Trusts to copy us in on discharge to community pharmacy?</b>	<p>This FAQ arose within the context of a Mental Health Trust which would find it useful to know about discharges from Acute Trusts for some patients.</p> <p>This is technically possible within the PharmOutcomes environment with a small amount of development provided that the source system can record the additional destination on discharge and provided that all information governance considerations have been considered within the SOP.</p>
<b>Can Trusts receive a bespoke notification from community pharmacies after follow-up?</b>	<p>This FAQ also arose in the context of a Mental Health trust which would welcome updates from community pharmacists.</p> <p>This is easily possible within the PharmOutcomes system at no additional charge provided the Trust has a secure nhs.net email account that can be used which is appropriately monitored and actioned.</p>

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# Formal Sign-offs for Go-Live

Sign-off processes vary on a Trust by Trust basis but the following are likely to be required. It is recommended that each Trust defines the person responsible for each area at the start of the project and that they are kept involved / informed throughout.

Area	Declaration	Name	Date	Signed
<b>Message content</b>	I declare that the content of discharge messages to be sent to community pharmacy has been properly identified, considered and approved and that the project can go live once all other areas are signed off.			
<b>Standard Operating Procedure</b>	I declare that the Trust has determined the way it wants to send discharge referrals to community pharmacy, developed a robust supporting operating procedure and trained all relevant staff. I declare that the project can go live once all other areas are signed off.			
<b>IT</b>	I declare that all IT related work required to implement discharge referrals to community pharmacy, including associated security and IT governance work, has now been completed and that the project can go live once all other areas are signed off.			
<b>IG</b>	I declare that all information governance work required to ensure the safe launch and operation of discharge referrals to community pharmacy has now been completed and that the project can go live once all other areas are signed off.			
<b>Go Live</b>	I agree that all preparatory work for implementing discharge referrals to pharmacy has been reported as being completed to a satisfactory standard and agree that the project can go live.			
<b>Project Close</b>	I agree that all evaluation work following go live of discharge referrals to community pharmacy has been completed to an acceptable standard. Lessons learned have been reported to the AHSN and follow up actions have been agreed as necessary. I agree the project can be closed for this Trust.			



# Contact Information

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<b>Pinnacle Health LLP IT support</b>	<a href="mailto:itk.support@phpartnership.com">itk.support@phpartnership.com</a>
<b>Pinnacle Health LLP information governance</b>	<a href="mailto:pam.bowes@phpartnership.com">pam.bowes@phpartnership.com</a>
<b>Pinnacle Health pharmacist support</b>	<a href="mailto:kevin.noble@phpartnership.com">kevin.noble@phpartnership.com</a>

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You can also contact us by phone on 01983 216 699


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<b>More information on the Newcastle Study</b>	<a href="mailto:hamde.nazar@durham.ac.uk">hamde.nazar@durham.ac.uk</a>
<b>More information on the economic evaluation</b>	<a href="mailto:gary.warner@phpartnership.com">gary.warner@phpartnership.com</a>
<b>More information on the PharmOutcomes solutions from the Pinnacle Professional Services Team</b>	<a href="mailto:pst@phpartnership.com">pst@phpartnership.com</a>

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# Available Support Materials

We have set up a microsite of additional documents which may be of help in preparation and planning. Simply browse to <https://bridgingthegap.pharmoutcomes.org> which will take you to the Pinnacle Health website, or you can go directly to <https://phpartnership.com/bridgingthegap>.

HOME   OUR OFFER   PRODUCTS   ABOUT US   CAREERS   RESOURCES   CONTACT


## HOSPITAL REFERRALS TO COMMUNITY PHARMACY

### BRIDGING THE GAP

When a patient with complex needs is discharged from hospital, with their consent we can collect information from the hospital's IT system and make this available to the patient's chosen community pharmacy. This enables the nominated pharmacist to provide follow up reviews and support.

Independent evidence shows that this significantly reduces the number of patient readmissions and can save the NHS £millions.

If you are planning to implement e-referrals on discharge or would like to know more, please get in touch with Kevin Noble, implementation lead, at [kevin.noble@phpartnership.com](mailto:kevin.noble@phpartnership.com).



#### DIRECT DOWNLOADS

These documents are available for direct download.

BRIDGING THE GAP	<a href="#">Bridging the Gap documentation.</a>
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The following documents are available to download immediately from the microsite.

<b>Bridging the Gap</b>	The latest version of this implementation support pack
<b>Information Governance</b>	Partially pre-populated PharmOutcomes System Assessment Template to assist with Trust system risk assessments
<b>General</b>	Information template - your organisation information we need to initiate your contract.  Example hospital information letter for patients as an alternative to the example in Appendix 1  Example hospital guidelines for hospital pharmacists  Example Standard Operating Procedure for entering a referral to community pharmacy,

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Example Standard Operating Procedure for amending a referral to community pharmacy,

Example Standard Operating Procedure for cancelling a referral to community pharmacy,

Example Standard Operating Procedure in the event of PharmOutcomes down time.

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*Our thanks and acknowledgments are extended to the Countess of Chester Hospital NHS Foundation Trust for permission to use their example material.*

# Additional Material Available on Request

*The following technical specifications are available on request from our interoperability support service on **01983 216 699** or at [itk.support@phpartnership.com](mailto:itk.support@phpartnership.com)*

Our apologies for any inconvenience caused by not making these directly available but experience has shown that technical implementations progress much more smoothly for Trusts when we make direct contact with technical staff at the earliest possible stage.

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<b>Technical</b>	<u>Technical specification for transfer of care on discharge - HL7 v2</u> <i>This is normally the only technical specification needed</i>
	<u>Technical specification for transfer of care on discharge - CDA (HL7 v3)</u>
	<u>Technical extension for 'notification only' extension option</u>
	<u>Technical extension for 'notification on admission' extension option</u>

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*The following Information Governance documents are available on request from our Information Governance Lead on **01983 216 699** or at [pam.bowes@phpartnership.com](mailto:pam.bowes@phpartnership.com). Again we apologise for any inconvenience caused by not making these directly available but this is to ensure that distribution of the content is appropriately controlled.*

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<b>Information Governance</b>	<u>Partially pre-populated Privacy Impact Assessment for PharmOutcomes</u>
	<u>Pinnacle Information Governance and Technical Specification</u>

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# Appendices

## **Within this document**

- Appendix 1      Example Patient Information Leaflet
- Appendix 2      Example Service Flowchart
- Appendix 3      Example PharmOutcomes View
- Appendix 4      Example Community Pharmacist View
- Appendix 5      Electronic Transfer Data Map
- Appendix 6      Project Plan Template

Each of the examples and templates can be provided as individual documents on request.

# Appendix 1

## Example Patient Information Leaflet

Our thanks and acknowledgements go to South West Academic Health Science Network, Yeovil Hospital and Somerset LPC for developing this leaflet.



### What is the Medicine Support Service?

When you are ready to leave hospital, you can choose to continue part of your care with the Medicine Support Service.

The service, provided free by the NHS, creates an important link with your community pharmacist, whom you will visit and spend time discussing your medicines, asking any questions you may have and getting all the information you need.

By understanding your medicines and the most effective ways to take them, you can make sure you get the most out of them. Your pharmacist will give you the knowledge and support you need to put you in control of managing your medicines at home with confidence.

The Medicine Support Service begins after you leave hospital and your community pharmacist will notify your GP if necessary.

### How could the service help me?

Around half of all medicines prescribed to patients are not taken as intended. This can include taking the incorrect dosage, at the wrong time, or not at all.

When medicines are not taken as intended your condition isn't treated correctly and could even get worse. Your pharmacist can give you all the information you need to allow you to get the best from your medicines and help you to stay healthy at home.

The Medicine Support Service creates better links between hospital and community pharmacists. Through sharing information we are able to support you in the best way possible.



**If you would like to use the service or have any questions, talk to the pharmacy staff when they visit you in hospital.**

## How does the service work?

- You choose which pharmacy is convenient for you.
- Once you have given your consent, your discharge summary with information about the medicines you are taking will be sent securely through our electronic system to the pharmacy that you have selected.
- Once you are home from hospital, the pharmacist will contact you and arrange a convenient time for you to visit them.

**At your consultation the pharmacist will go through all the medicines you are taking with you and...**

1. Discuss any new medicines
2. Look at changes to any existing medication that were made during your hospital stay
3. Review all the medicines that you are taking

The pharmacist will take the time to fully explain what each medicine is for, common side effects, and how to take them safely.



Signing up to the service is very quick and your hospital pharmacy team will take you through the process.

## Appendix 2

### Example Service flowchart

#### Service Stage Flowchart





# Appendix 3

## Example PharmOutcomes View

PharmOutcomes - Live System

[Exit](#) Logged in as: Gary Warner from Pinnacle Health Partnership LLP (Switch Organisation)

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### Service Design

- [Browse Service Library](#)
- [Edit Service Design](#)

### Provision Reports Preview

- [Basic Provision Record \(Sample\)](#)
- [Refer to GP with ADR \(Sample\)](#)

### Service Support

If you receive a referral for a housebound patient, please click [here](#) for further guidance and access to PREM2 forms.

### Transfer of Care (ToC) - Pharmacy Follow-up (Preview)

**Enrolment Requirements** [Preview Service for Commissioners](#)

The commissioner requires that the individual delivering this service meets certain criteria. Enter your name in the box below and select from the list.

Practitioner Name

Enter your full name in the box above...  
Then either select your name when it appears, or select "New Practitioner" if you have not enrolled before.

Registration Details brought forward	
Original Referral	28 May 2015
Referred from	Violet Patch Pharmacy F1234 (Flowers Medical Centre 5477)
Patient Name	Mickey Mouse
Date of Birth	2003 Feb 01
Ethnicity	Not Stated
Gender	Male
Address	123 Alphabet Road, Broad way
Postcode	AB12 3CD
NHS Number	1111111111
Contact Details	email MickeyMouse@invalid, tel 01234 567890 not weekends
Consent Granted	Consent Granted: One of: Yes; No
Name of pharmacy	Provider being referred to
GP Practice	Selection from "GP Surgeries" lookup list
Patient Information	Patient Information: None or more of: Reported allergies; Medication changes; Other
Further Information	Answer to "Further Information" text box
Recommendations	Recommendations: None or more of: Medicine Use Review; New Medicine Service
New medicine	Answer to "New medicine" single line input
Notes	Answer to "Notes" text box
Name	Answer to "Name" single line input
Job title	Answer to "Job title" single line input
Contact number	Answer to "Contact number" single line input

**Acceptance and completion of referred service**

Referral Accepted for completion now [Revert and discard changes](#)

#### Long term condition

As a result of the support provided, the patient has a better understanding of:

##### From MMS, MUR or Advice Given

- ☐ Their cardiac condition
- ☐ Their diabetes
- ☐ Their respiratory condition
- ☐ The purpose of their medication
- ☐ When to take/use their medicines
- ☐ How to take/use their medicines
- ☐ Other

If other, please provide details. Tick ALL that apply

#### Side-effects Experienced

##### Adverse Drug Reactions

- ☐ Not Applicable - No ADRs
- ☐ Manageable and non-harmful - patient to continue
- ☐ Patient stopped taking medicine
- ☐ Refer to GP

Detail of any side effects/ADRs

Yellow Card Report ☐ Yes ☐ No ☐ Not Applicable  
Was a Yellow Card report made to the MHRA

Data here will also appear on the GP Referral letter if patient is referred

#### Audit of support provided - Tick all that apply

##### Support services provided

- ☐ None
- ☐ New Medicines Service
- ☐ Medicines Use Review (This will be counted as a MMS/MUR)
- ☐ Medicines reconciliation (Do not tick if already recorded)
- ☐ MAR chart provided
- ☐ Large print labels
- ☐ Talking labels
- ☐ Easy open tops
- ☐ Review dose form
- ☐ Review MDS arrangements
- ☐ Pharmacy managed repeat service
- ☐ NHS Repeat dispensing
- ☐ Home delivery
- ☐ Stop Smoking service
- ☐ Flu vaccination (September to March only)
- ☐ Other Public Health Intervention
- ☐ Specialist Medicines Management Service assessment
- ☐ Other

Tick ALL that apply, if Other please specify

##### Repeat Reconciliation

- ☐ Repeat not available or done previously
- ☐ Medicines stopped in hospital still on repeat
- ☐ Wrong drug
- ☐ Wrong strength
- ☐ Wrong dose
- ☐ Wrong formulation
- ☐ Other

Other Actions

This information will be used for service evaluation so please do not include patient identifiable information

In your professional opinion, what is the likely scale of impact if you had NOT undertaken this review or intervention?

##### Scale of Impact

- ☐ No likelihood of admission (RIO 1)
- ☐ Possible admission within 28 days (RIO 2)
- ☐ Likely admission within 28 days (RIO 3)

An explanation of the RIO score and examples of actions / advice can be found here

## Appendix 4

# Example Community Pharmacist Completion

### How to Accept, Complete Now and Reject Referrals

Once you click on a referral, the information submitted by the hospital will show. If the patient requires an MUR or NMS consultation, ring the patient in order to arrange an appointment for the consultation.

A referral should be dealt with promptly as the maximum benefit of a NMS or MUR should be seen in the first 10 days of commencing a new medicine.

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Home Services Assessments Reports Claims Admin Gallery Help

Reports, Letters & Reminders

Basic Provision Record

Completed Referral Form

Provision: 42653841  
Originally: 19-May-2015 00:00  
Saved: 19-May-2015 13:12  
Edited:

Service Support

### Pharmacy Discharge Referral Follow-up

#### Registration Details brought forward

Original Referral	19th May 2015
Referred from	Wellington and District Cottage Hospital (Wellington and District Cottage Hospital)
Patient Name	patel pan
Date of Birth	25 May 1943
Gender	Male
Address	23 Lanscott Street, Rockwell Green, Wellington, Somerset, TA21 9RS
Postcode	TA21 9RS
NHS Number	0300201
Contact Details	099166677353455
GP Practice (Selection)	Testvale Surgery, 12 Salisbury Road, Totton, Southampton, Hampshire SO46 3PY (AS2132)
Referral reason	Patient cannot read normal labels/Patient may have undiagnosed condition at home
Support required	NMS/Home delivery service
Hospital team member	delish
Contact number	099166635447877255

The patient's telephone number can be found here – use this to make an appointment for and MUR/NMS.

Reasons for the referral can be found here, i.e. home delivery, MUR, NMS, Smoking cessation...

Click 'Complete now' if the patient has presented for the consultation.

#### Acceptance and completion of referred service

This referral has been made to your service.  
If you are unable to complete the referral, you can reject it, but please state the reason for rejection in the Notes box below.  
If you can accept the referral but cannot complete the associated actions immediately, click on the accept button. You can make relevant notes in the Notes box.

Complete now Accept Reject referral

(Click to hide Referral History)

#### Referral History

Referred to Test pharmacy Somerset LPC by Wellington and District Cottage Hospital  
2015-05-19 13:12:47

By clicking the 'Accept' button the referral will stay on the 'Outstanding referrals' section of the 'Services' screen for you to complete at a later date.

Sometimes, a referral may need to be rejected, for instance, if the patient referred does not belong to your pharmacy.

Ensure you write a reason for the rejection.

#### Acceptance and completion of referred service

This referral has been made to your service.  
If you are unable to complete the referral, you can reject it, but please state the reason for rejection in the Notes box below.  
If you can accept the referral but cannot complete the associated actions immediately, click on the accept button. You can make relevant notes in the Notes box.

This is not our patient - we believe they are a patient at our branch in Avonmouth

Complete now Accept Reject referral

(Click to hide Referral History)

#### Referral History

Referred to Test pharmacy Somerset LPC by Wellington and District Cottage Hospital  
2015-05-19 13:09:03

Once you have written a reason, click on 'Reject Referral' – this will then send the referral back to the hospital for action.

## How to Complete a Referral

By clicking on the 'Complete Now' button, the system will allow you to input the results of the referral:

### Support services provided

**Support audit**

☒ NMS

☐ MUR

☐ Medication compliance aid

☐ Medication compliance aid

☐ Update medication list for changes

☐ Non child resistant packaging

☒ Large print labels

☐ Home delivery service

☒ Removal of unused medication from patient home

☐ Stop Smoking Service

☐ Flu vaccination (Sept to March) (Specialist medicines management service assessment)

Tick ALL that have been provided

Tick the boxes of the support you have given or will now provide as a result of the referral.

### Service Outcomes

As a result of the support provided, the patient has a better understanding of

**From NMS/MUR**

☐ Cardiac

☐ Respiratory

☐ Diabetes

☐ Advice given about medication

☒ Medicines use

☒ When to take medicines

☒ How to take medicines

☐ Other

Tick ALL that apply, if Other please specify

Give some understanding of the benefits the patient has had due to the referral.

Has the patient experienced any Adverse Drug Reactions since discharge (ADR)

Any ADR's ☒ Yes ☐ No

Detail of any side effects/ADRs

[Reporting ADR's](#)  
You can report an ADR here

Link to the Yellow Card Reporting website.

### Adverse Drug Reaction Outcomes & GP referral

ADR Outcomes

Select from drop-down

If outcome of ADR requires GP referral select either first or second option below to highlight issue. If no referral necessary select Not Applicable

**GP referral as**

☐ Significant ADR

☒ Patient stopped taking medicine

☐ Not Applicable as no referral

If there has been an adverse drug reaction, please complete this section. Ensure that the patient's GP is informed via your usual communication method.

### Information on next repeat prescription

Did the next repeat prescription from the GP match the hospital discharge letter

Next Repeat matched? ☐ Yes ☒ No

**If No record issue**

☐ Medicines stopped in hospital still on FP 10

☒ Wrong drug

☐ Wrong dose

☐ Wrong frequency

☐ Wrong formulation

☐ Other

If Other please state

Additional comments

Please detail additional actions

This section allows you to demonstrate whether the next GP prescription matched that of the referral information. If changes to the patient's medication have been made, make a note of stopped and changed medication on the patient's PMR so that incorrect prescriptions can be flagged and notified to the GP.

### Intervention completed by

Pharmacist Name

GPNC number

## How to Define Completed, Accepted and Rejected Referrals

This can be found under the 'Service' tab:

The screenshot shows the 'PharmOutcomes' web application interface. The 'Services' tab is selected, displaying a table of 'Recent Provisions'. The table has columns for 'Outstanding Referrals', 'Service (stage)', 'Identifiers', 'User', and 'Status'. A callout box points to the 'Status' column, stating: 'Accepted referrals will remain under 'outstanding referrals until actioned..'. Another callout box points to a row where the status is 'Rejected', stating: 'Rejected referrals will look like this on your provision record.' A third callout box points to a row where the status is 'Completed', stating: 'Completed referrals will look like this on your provision record.'

Outstanding Referrals	Service (stage)	Identifiers	User	Status
2015-05-19	Pharmacy Discharge Referral Follow-up	NW	Somerset Test Pharmacy	Accepted
2015-05-19	Pharmacy Discharge Referral Follow-up <small>This record was created by rejecting a referral and is not editable (Click here to view record)</small>	MJ	Somerset Test Pharmacy	Rejected
2015-05-19	Pharmacy Discharge Referral Follow-up	JP	Somerset Test Pharmacy	Completed
2015-05-19	Pharmacy Discharge Referral Follow-up <small>Already shown above</small>	MJ	Somerset Test Pharmacy	Pending awaiting completion

Service Centre

Contact your local commissioners if you cannot see services you expect to see.

Click here to show explanations of the Provision Status column

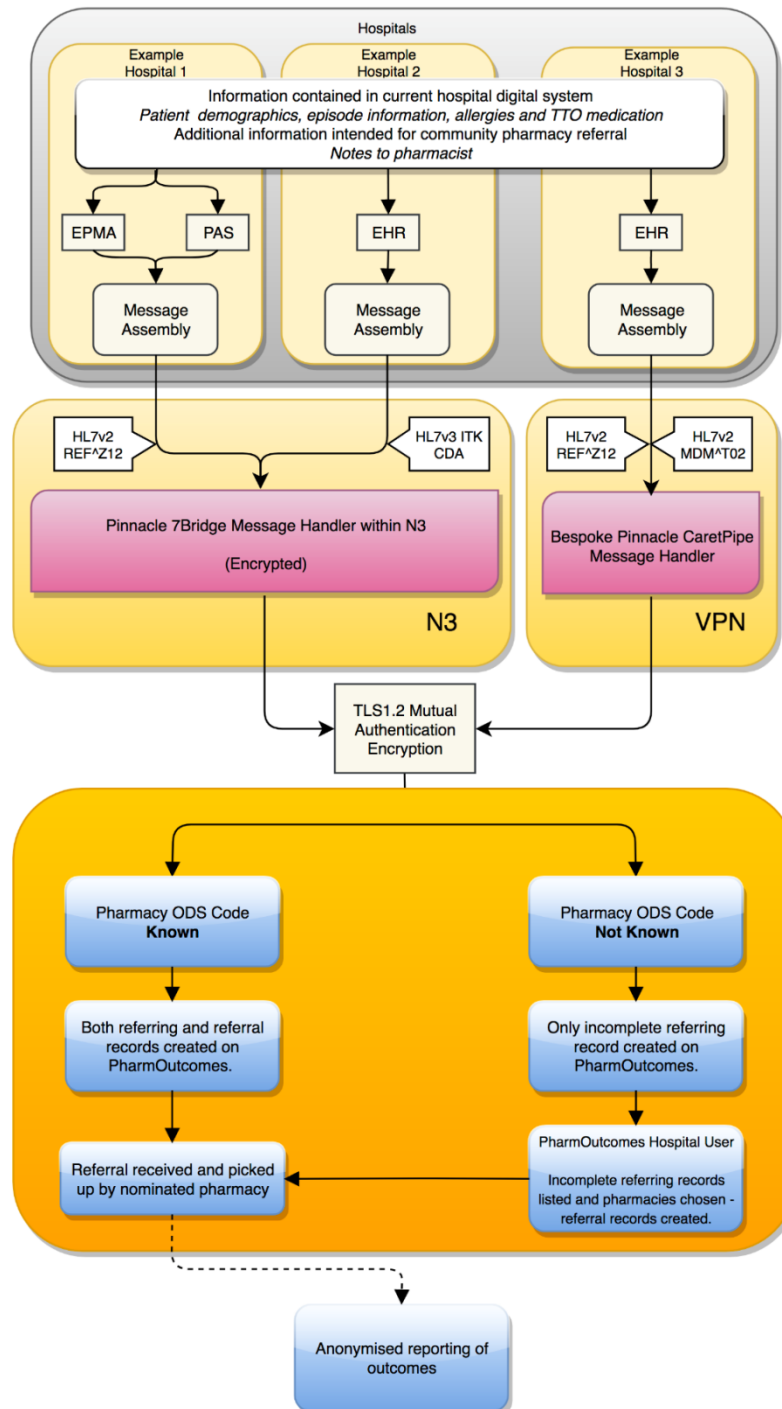
### Patients Who Do Not Attend

There will be patients that don't attend for many reasons, for example they are housebound. In this instance you will not be able to provide an MUR but so long as you can gain signed consent, NMS phone calls can still happen. Changes such as large print labels, compliance aids etc. can all still be actioned without the presence of a patient.

# Appendix 5

## GDPR Electronic Transfer Data Map

Hospital Referral to Pharmacy - Electronic Transfer Data Map



## Appendix 6

### Template Project Plan

Category	Task	Start	End	Owner
Project Initiation	Identify Trust project lead			Trust
	Identify Trust IT lead			Trust
	Identify Trust Governance lead			Trust
	Identify Trust person responsible for SOP			Trust
	Identify Trust lead for research approvals			Trust
	Identify Trust person to approve go-live			Trust
	Contract in place between Pinnacle and Trust (draft available <a href="#">here</a> )			Pinnacle/Trust
Project Start Up	Determine full, partial or manual approach			Trust
	Develop draft project plan with timescales and responsibilities			Trust
	Confirm approach, responsibilities and timescales with Trust leads			Trust
	Confirm approach and target launch date with person to approve go-live			Trust

Determine patients and information to be included in transfers	Decide and document which information is to be passed across			Trust
	Advise IT lead of information fields to be passed across (unless manual)			Trust
	Decide which patients (all or groups) to be included and how phased			Trust
	Develop standard operating procedure			Trust
	Identify and document staff to be trained.			Trust
	Develop training session and supporting information packs for staff			Trust
	Develop supporting information material for patients			Trust
	Schedule dates for training including rooms etc.			Trust
	Standard operating procedure and training plans complete			Trust
	Ready for go-live approved by SOP lead ( <i>Milestone</i> )			Trust
IT Requirements	FOLLOWING ONLY NEEDED FOR FULL OR PARTIAL ELECTRONIC INTEGRATION			
	<b>Trust Preparation</b>			
	IT lead to identify if currently sending discharge information electronically to GPs			Trust
	IT lead to identify current message type in use (HL7v2, HL7v3 CPA payload, other)			Trust
	IT lead to determine transport type (HTTPS or MLLPS with TLS MA)			Trust
	IT lead to identify current PAS system			Trust
	IT lead to identify current dispensing system			Trust



	IT lead to contact the integration team at Pinnacle at <a href="mailto:itk.support@phpartnership.com">itk.support@phpartnership.com</a> The team can also be contacted by telephone on 01983 216 699.			Trust
	<b>Messaging Activity</b>			
	Pinnacle to forward relevant message specification and support documentation to IT lead			Pinnacle
	Trust to configure message with required information content (incl. a means of adding pharmacy ODS code)			Trust
	<b>Set Up Activity</b>			
	Pinnacle to add Trust to 7Bridge for routing/transport			Pinnacle
	Pinnacle to complete 7Bridge integration documentation			Pinnacle
	Pinnacle to create new commissioning area if required			Pinnacle
	Pinnacle to create an Administrator user account if a new area			Pinnacle
	Pinnacle to create Commissioner primary user if a new area			Pinnacle
	Pinnacle to determine and add pharmacies to follow-up footprint			Pinnacle
	Pinnacle to import Discharge Referral service from super user page			Pinnacle
	Pinnacle to connect referral service ITK fields			Pinnacle
	Pinnacle to add hospital as a provider with their ODS code			Pinnacle
	Pinnacle to create user in the hospital called "dispensary system" and grant service provision rights			Pinnacle
	Pinnacle to create a hospital super user for support use			Pinnacle

	Pinnacle to create a primary user for the Trust clinical/technical team			Pinnacle
	Pinnacle to create appropriate users at the Trust as advised by the IT lead			Pinnacle
	Pinnacle to accredit the hospital for the referral service			Pinnacle
	Pinnacle to accredit all relevant community pharmacies for the follow-up service			Pinnacle
	Pinnacle to add the interoperability mapping for the Trust			Pinnacle
	Pinnacle to complete all supporting technical documentation			Pinnacle
	<b>Testing and Fine Tuning</b>			
	Send and receive test messages and validate for accuracy.			Trust/ Pinn
	Refine the data set with the clinical team until correct.			Trust/ Pinn
	Discharge messages with all relevant content being sent accurately ( <i>Milestone</i> )			Trust/ Pinn
	Pinnacle to document agreed final configuration			Pinnacle
	<b>User Support Material</b>			
	Trust to provide any locally required user guides			Trust
	Any IT training requirements included in planned training.			Trust
	Pinnacle to ensure generic and locally supplied user guides are accessible			Pinnacle
	<b>IT Sign-Off</b>			
	Ready for go-live approved in writing by IT lead ( <i>Milestone</i> )			Trust

Information Governance Requirements	Trust IG lead to identify and document any information governance queries.			Trust
	Trust IG lead to send any queries to Pam Bowes at Pinnacle at pam.bowes@phpartnership.com or call on 01983 216699.			Trust
	Pam to respond to any queries and follow ups until IG lead satisfied.			Pinnacle
	Trust Privacy Impact Assessment prepared and approved if required (Pinnacle Template available <a href="#">here</a> )			Trust
	SLA with Data Processing Agreement in place with Pinnacle (available <a href="#">here</a> )			Trust/Pinnacle
	Any IG training requirements included in planned training			Trust
	Ready for go-live approved in writing by IG lead (Milestone)			Trust
Optional Research and Evaluation	Trust to determine approach and lead on research proposals			Trust
	Trust lead to identify any local requirements			Trust
	Trust lead to obtain clearance for research from local board and IG as appropriate			Trust
	Researcher develops / amends study protocols as required			Trust
	Ready for go-live approved in writing by research lead (Milestone)			Trust
Pre Go-Live	Confirm required approvals to progress have been signed-off			Trust
	Agreed start date for live message transfer agreed with Pinnacle			Trust / Pinn
	Trust formal GO-LIVE DECISION approved in writing (Milestone )			Trust

	Staff training delivered			Trust
	Community pharmacy training delivered			Trust
	Trust project lead confirms training delivered and Trust good to go.			Trust
	Pinnacle confirms company is ready to start receiving live messages.			Pinnacle
	Live transfer of discharge information to community pharmacy begins. <i>(Milestone)</i>			Trust / Pinn
Post Go-Live	Pinnacle monitors messaging for transmission errors			Pinnacle
	Community pharmacists carry out follow-ups as appropriate			Com Pharm
	NHSE, AHSN and Trust monitor reports and activity.			Trust
	Post implementation check between Trust, NHSE and AHSN			Trust
	Trust implementation sign-off recommended in writing by Trust leads.			Trust
	TRUST IMPLEMENTATION SIGN-OFF confirmed in writing <i>(Milestone)</i>			Trust
	Evaluation research report completed			Trust
	Evaluation report approved for distribution <i>(Milestone)</i>			Trust
	PROJECT SIGNED OFF as complete <i>(Final Milestone)</i>			Trust