PharmOutcomes®

Smarter Referrals

Manage your referrals to pharmacies... *in no time at all!*

PharmOutcomes®

Delivering Evidence

Developing an integrated approach to patient care and support following hospital discharge has been shown to both reduce frequency of hospital readmission and generate significant savings for the local health economy[1]

"Patients receiving a follow up review at their community pharmacy were three times less likely to be readmitted to hospital after discharge"

[1]Nazar, H., Brice, S., Akhter, N., Kasim, A., Gunning, A., Slight, S. and Watson, N. (2016). New transfer of care initiative of electronic referral from hospital to community pharmacy in England: a formative service evaluation. BMJ Open, 6(10), p.e012532.

" Just 10 referrals a day could generate £1.5million of efficiency savings "

Pinnacle Health LLP are now able to offer three options to support transfer of care, ranging from the original web based solution to a fully integrated approach that makes this process seamless.

The option adopted is down to choice and hospital IT infrastructure. All options are described in this brochure.

The integrated solution allows hospitals to use information they already hold within their own systems to generate and send a referral to a nominated community pharmacy. This solution does not require the hospital team to login to a web based portal. This frees up more time for patient care at the hospital and provides efficient transfer of relevant data to a patient's nominated community pharmacy at the point of discharge.

Hospital referral to pharmacy

A flexible solution tailored to meet your needs

Flexibility with service design has always been a key feature of PharmOutcomes. Service templates within PharmOutcomes can be created to match referral objectives whether this be targeting particular patient groups or simply tailoring a follow up service to capture specific information. Templates can be edited locally without reference to a support team. This means that each referral service can be tailored for each hospital site to ensure objectives are met as we realise there is no "one size fits all" solution.

This flexibility with service design applies with each of the three options described in this brochure.

Service options

The three options

There are three flexible options for hospital teams to consider regarding system set up, dependent upon their infrastructure.

Full Integration

Fully integrated solution

If a hospital team is already sending electronic discharge information, full integration is possible. With this option the hospital team can record all relevant patient information within their systems (PAS or dispensing system or combination of both) including details of the pharmacy for onward referral, including the ODS code. Once the necessary mapping work has been completed to link the hospital systems to PharmOutcomes, all discharge information will be transferred automatically from the hospital systems to the community pharmacy when the discharge letter is published. There will be no need for further data input or to access the web application. The community pharmacy will be notified of all referrals requiring action at the top of their service screen; in addition, a non-patient identifiable email is sent to the pharmacy to notify them of their required action.

Partial Integration

Partial integration with hospital systems

With this option a "trigger", such as the publication of the discharge letter, would pre-populate a PharmOutcomes template with information from the hospital's Patient Administration System (PAS), electronic dispensing system or both. Typical fields chosen include the patient demographics, medicines list on discharge and allergy list. Staff would then log in to the web application to complete the referral form with items such as the community pharmacy for onward referral, add further information or to attach additional documents. The community pharmacy will be notified of all referrals requiring action at the top of their service screen; in addition, a non-patient identifiable email is sent to the pharmacy to notify them of their required action.

3

Web Portal Interface

Data entry to web application at both hospital site and community pharmacy

Even if a hospital cannot send electronic discharge information, the web application can still be used to send referral information. Information is recorded using the web interface that also allows attachment of support documents such as a discharge summary that can be picked up at the pharmacy when the referral is sent. The community pharmacy will be notified of all referrals requiring action at the top of their service screen; in addition, a non-patient identifiable email is sent to the pharmacy to notify them of their required action.

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Integrated Solution

Advantages for hospital teams

- No need to re-key any information as the hospital systems will communicate directly with PharmOutcomes

- All discharge information can be passed securely into PharmOutcomes via the N3 network

- A discharge summary can be attached to the patient discharge information message if required

- The message translation is managed by the PharmOutcomes Message Handler with the availability of service confirmation messages being returned to the hospital system to confirm referral status

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Integrated Solution

How does this work?

Hospital teams typically have two key information systems – the PAS system and the electronic dispensing system. The PharmOutcomes message handling system can securely transfer messages, made up from information recorded in Trust-determined data fields, to a nominated pharmacy. Discharge summaries in this case become an integral part of the message avoiding the need to attach further documents. The pharmacy will be alerted of a referral by email without revealing patient identifiable data.

The message can be sent either as an HL7 v2 data packet or an HL7 v3 CDA payload, using the national NHS ITK standards. The choice of message types will depend upon the message broking system in use at the hospital. The hospital IT team will need to view the relevant PharmOutcomes specification that details how we support each process, and copies of these specifications will be provided on enquiry.

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Integrated Solution

Maintaining flexibility with service design

Even with the fully integrated solution, PharmOutcomes can provide locally determined data-sets. This is because the web interface used to record the follow up is locally configurable and each Trust can determine the fields that are transferred from either hospital system.

Interfaces can make use of free text fields within the hospital systems to record information such as action plans thereby avoiding the need to attach any additional documents. If the hospital wishes to use attachments to pass on additional information, the partially integrated solution can manage this.

The system is completely configurable allowing each hospital to have a different template that suits both their care priority focus and any specific target patient groups.

Integrated Solution

Notification Services

Notification of hospital admission passed back to a community pharmacy is very useful as it informs process change at the community pharmacy to avoid unnecessary dispensing and medicine supply.

As PharmOutcomes offers each hospital incredible flexibility with regard to service design it is very easy to set up a "Notification of hospital admission" service.

All service options would support a "Notification of hospital admission" service. This service type can be set up at sites using any of the three service management options described.

Community pharmacy selection for onward referral

In order to use the fully integrated solution, the preferred pharmacy ODS code must be recorded in either the PAS or the electronic dispensing system so it can be attached to the referral message.

A list of ODS codes can be obtained simply, without logging in, directly from PharmOutcomes with a quick and easy search facility through a dedicated link provided to the hospital.

We understand that JAC will be introducing a dedicated community pharmacy look-up field in due course for those hospitals using this system.

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For sites using the web application either as a stand-alone solution or in the semi-integrated form, pharmacy selection is supported by a variety of look-up functionality. The pharmacy name field within the web interface will search providers on entry of:

- Pharmacy name
- Town name
- Post code
- Partial address

Only accredited sites are selectable and are easily identified to inform patients. Additionally, PharmOutcomes provides an icon adjacent to the pharmacy name field that when clicked will take the user to a Google Map view of accredited pharmacies in a particular locality so the patient can easily identify and select their preferred pharmacy for referral.

Service Considerations

Patient Consent

For users of the web interface or the partially integrated solution, consent fields can be added as part of service design meaning consent can be easily captured. For hospitals who elect to use the fully integrated solution, consent would be managed internally in line with local governance arrangements.

Service Considerations

Community Pharmacy follow up

As far as the community pharmacy is concerned, the choice of system set up at the hospital does not affect the format of the referral received at the community pharmacy i.e. the process is consistent.

Pharmacies are notified of a referral by email and the appearance of the referral at the top of their services screen. Clicking the referral in their service screen will reveal the information sent by the hospital and allow the follow up to be recorded. The referred information appears as a grey information stub once the referral is opened.

Service Considerations

Accepting or rejecting a referral/ referral completion

On opening a received referral, the community pharmacist can elect to accept, complete or reject the referral by clicking embedded buttons. If a referral is rejected, the hospital team are notified of this allowing the referral to be redirected, if appropriate.

Links embedded into the service screen at the community pharmacy can allow easy access to useful reporting tools such as the MHRA Yellow Card Scheme.

Saving data at the community pharmacy can trigger various notifications to key stakeholders. This can include the patient's GP and the hospital team if they require notification of outcomes.

As far as service design and set up is concerned, specific hospital referrals are linked to specific community pharmacy follow ups. This means the correct service template appears at the community pharmacy on opening a hospital referral, making it easy to complete the required referral follow up. Each hospital can have a unique service template focusing on their own priority areas.

Q "What are the benefits to Trusts and CCG's of commissioning a hospital referral service?"

A:

It has been shown that referring patients to their community pharmacist following hospital discharge generates massive efficiency savings. By way of an example, just 10 referrals a day will generate savings in the region of £620,000.00 for a Trust and £730,000.00 for a CCG per annum. These figures are based on validated outcome information recently published in BMJ Open.

FAQs

Q "What are the user benefits?"

A:

PharmOutcomes offers complete flexibility of service design meaning each hospital gets a tailor made data capture set that meets their needs. The same applies to follow up service design. Service templates can be configured locally.

Intuitive reporting ensures ease of patient tracking meaning service administrators can view a patient journey with visibility of outcomes at both referral and follow up stages.

In-built nhs.net capability allows notifications to be sent securely when data is saved. This can include GP notifications of adverse events or notification back to hospital teams.

Q "How user friendly is the system with regard to data entry?"

A:

The system is very user friendly whatever solution is chosen. We are often asked "how long does it take to enter data" and the answer is that this is both user and service dependant i.e. how many fields need to be recorded and what is the ability of the pharmacy team member to login and enter data.

For hospitals using the web application, data entry will obviously be more time consuming than at sites that opt to use partial or full integration. In these cases the data entry time is either greatly reduced through pre-population with partial integration or removed altogether in the case of fully integrated solutions.

Q

"What are the likely
implementation
costs?"

A:

For areas wishing to explore the fully integrated solution, Pinnacle Health LLP have decided to support the cost of licence for the Pharmacy follow up stage of this service free of charge as part of our social enterprise activity. This is because we believe as an organisation in the value that this type of joined up working will deliver for patients and the NHS. There is already evidence emerging to demonstrate that a community pharmacy follow up post discharge will mean a patient is three times less likely to be readmitted to hospital.

For either of the integrated solutions, the cost for hospital sites reflects the shared cost of implementation of an N3 solution, with the shortfall being covered by Pinnacle Health LLP as part of our social enterprise activities. We recognise that NHS Trusts often operate more than one hospital so our cost of deployment across a whole footprint will also be considerably cheaper than at disparate sites. The cost for the first hospital site in a Trust is £3995 per annum with additional sites added at £995 per annum. So, for example, the implementation cost for a Trust operating three sites would be £5985 per annum. For Trusts adding new sites through the year, a pro-rata charge would be applied.

For small numbers of disparate sites we would adopt a case by case approach and although costs would be higher they would not exceed £3995.00 plus VAT per site

For the web-based solution, not involving integration with the hospital systems, the cost of the license for each hospital site is in the region of £50 per annum, as they are simply another provider organisation added to a single or multiple service licence.

All prices are excluding applicable taxes, such as VAT. E&OE.

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Q "Are there any software or hardware costs?"

A: No, as the solution is web based there are no software or hardware costs beyond the licensing arrangements.

Q "Is there a monthly management fee to pay?"

A: No there are no other fee payments due outside of the annual licencing arrangements that are detailed in the previous answer.

Q "Are other hospitals currently using this system?"

A: As at October 2016, PharmOutcomes is currently being used in several locations to support hospital discharge. Newcastle hospitals sent over 2000 referrals using the web application in 2014/15 and are just switching to use the integrated solution. Dorset County Hospital are live with a semi-integrated solution but are exploring a shift to full integration. Yeovil Hospital, UHB Foundation Trust and Kings London have used the web interface to support their discharge services and Royal Cornwall Hospital are about to go live with a fully integrated solution. Several other sites are at a very early stage of matching service specification requirements and planning to go live in the near future.

Q: "How straightforward is implementation?"

A: Pinnacle Health LLP has built up expertise over the last year to enable a swift implementation. Regarding the integrated service options, our dedicated team will work with your IT team to clarify requirements and detail within the different specifications. As the solution uses the HL7 message that leaves the hospital message broker, the adoption of this solution is not dependant on the type of PAS or electronic dispensing system in use at the Trust.

For sites that opt to use the web solution, the service can be introduced in a couple of days.

Q: "I'm interested. What do I do to initiate implementation and what are the next steps?"

A: Pinnacle Health will be able to provide you with a clear action plan to implement your chosen solution as swiftly as possible; however, every Trust is different with regard to systems in use and messaging capabilities. For those organisations wishing to adopt the fully or partially integrated solution we need to know the following:

1. What dispensing system is currently in use at the Trust?

2. What PAS is currently in use at the Trust?

3. What message broker is currently in use at the Trust?

4. What is the current information source and flow for discharge?

5. If you plan to adopt the fully integrated solution, how would you record the pharmacy as part of the discharge information for onward referral in your hospital system?

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To find out more ...

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www.pharmoutcomes.org.uk