

# Telehealth in Practice

## Pflegewerk, Berlin, Germany - DIABETES

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### Ambition

The overall aim for implementing telehealth into the care management programme for patients living with Type 2 diabetes who monitor their own or have help in monitoring their blood glucose levels in the Berlin deployment site, is to reduce their risk of developing diabetes-related complications and improve self-management where appropriate.

### DIABETES ROUTINE CARE SERVICE MODEL



#### Level 1 : Self-management

Patient and Carer.

#### Level 2 : Supported Self-management

Patient, Carer, GP, Home-visiting Nursing Service, Social Support Worker

#### Level 3 : Specialist Supported Self-management

Patient, Carer, GP, Home-visiting Nurses, Hospital Specialists, Hospital Social/ Case Manager

### DIABETES TELEHEALTH ENABLED CARE MODEL



#### Level 1 : Self-management

Patient/carer trained in use of telehealth and self-management.

#### Level 2 : Supported Self-management

Shared telehealth monitoring information available to GP and Home Visiting Nurse, Hospital based teams through the Pflegewerk EHR. Alert response, text messaging, health coaching provided.

#### Level 3 : Specialist Supported Self-management

Home-visiting Nurses, GP, Specialist Services, Hospital-based Teams have access to shared telehealth monitoring information. Alert response, text messaging health coaching provided.

### Diabetes Care Management – routine care

The provision of diabetes services in Berlin comprises various settings. United4Health has included the Pflegewerk healthcare provider which delivers the diabetes disease management programme (DMP) as part of its integrated care contract with health insurance companies. Some patients live in their own home or flat fully independently, take their measurements on their own and are visited by the nurse as needed (Green). Others live in their own home and are visited regularly, but still take the measurements independently (Green). Some patients involved in U4H lived in assisted living units that belong to Pflegewerk, where they are assisted to take measurements regularly (Amber), but they still conduct a fairly independent lifestyle, with community rooms where they eat, chat, play cards, watch TV and conduct social life all together. Those patients most in need live in nursing homes, where they are supervised 24/7 and nurses take the measurements and provide the necessary care (Amber).

The DMP, following clinical practice guidelines published by various national and international diabetes agencies, is delivered by a wide range of professionals including GPs, consultants, specialist diabetes teams as well as other primary and secondary care professionals.

Pflegewerk are contracted to provide regular face-to-face visits to the patient's home by GPs or specialist doctors and nurses. During these visits, the patient's health and wellbeing is reviewed and their care plan and self-management plan adjusted accordingly.

Patients receive specialist diabetes care when they attend the emergency department or have an emergency admission to hospital (Pink).

### U4H Telehealth Enabled Diabetes Care Management

Berlin provides life-long monitoring services for patients living with diabetes. Patients either take their own weight, blood pressure and pulse and blood glucose measurements with a frequency prescribed by the specialist on first contact (in the project the frequency was once a week at least, unless prescribed differently by the doctor), are assisted in using their telehealth or have their measurements taken for them by a nurse. The system uses Bluetooth technology to transmit the readings to a Smartphone which then uploads the data to a central database as well as into the electronic Patient Health Record (PHR). The telehealth system generates alerts if measurements are outside the patient's personalised parameters and according to the service protocol. The alerts are sent to one or more people, such as doctor, care home nurse, family member, patient themselves, or other person explicitly authorised by the patient in order for appropriate action and/or response to be taken. These authorised members of the patient's care team can access the PHR to gain further information on the health status of the patient. Remote contacts with the patients are by telephone.

Pflegewerk have plans to integrate the telehealth data into the patient management software and the nationwide infrastructure, supporting eg electronic case records, in Germany.

### Diabetes telehealth configuration & key interactions: Pflegewerk, Berlin, Germany

