

## Patient After-Care Service Warrantee (PACS)

The warrantee is issued for products used for a specific therapy (medical intervention). The warrantee period goes beyond normal and reimbursed follow-up period. The warrantee is especially useful for therapies related to chronic diseases as these diseases have a tendency of recurrence or only partial alleviation of symptoms.

### 1. Why would Manufacturer be interested to issue such a warrantee?

Manufacturer is interested to develop products and train physicians on the use of their products to deliver lasting benefits to the patient. The clinical follow-up period in China varies but it typically does not track long term impact of therapies. There is currently no systematic way to assess how effective therapies are to improve outcomes over the long run. Measuring this over extended period following the procedure will help identify therapies where outcomes should be further improved (R&D). More specifically, it helps identify physicians who may benefit from additional training. The warrantee will reinforce the accountability of the manufacturer and also the physician towards better patient outcomes. The warrantee rewards physicians for good outcomes, incentivizes physicians to track patients outcomes over longer periods. During this tracking, the physician may be able to optimize medications or rehabilitation to improve patient outcomes. The warrantee may also be used to offset patient expenses when poor outcomes lead to extended treatments.

### 2. Warrantee from patient perspective

During the warrantee period, the patient will receive physician follow-up attention on a real-time basis. By providing regular updates (Patient reported outcome measures, PROM) to the mobile platform, the patient can provide feedback on the therapy outcome to the physician. This feedback is taken and prioritized so that patients whose outcome are below expectations can be identified early and patients might receive follow-up consultation, changes in prescriptions or even a follow-up procedure. The notion that patient outcomes matter to the physician will increase patient satisfaction. The knowledge that poor outcome reporting will reduce the fee the physician receives from the outcome monitoring platform will reassure the patient that the doctor is held accountable for outcomes.

### 3. How the Warrantee works

The manufacturer identifies products used during a specific intervention (surgery). For example a Pacemaker, a coronary stent, a hip implant, a cryo-balloon catheter for AF ablation.

The manufacturer decides on the warrantee period (e.g. 1 year) and the frequency of patient data upload. (e.g. every 2 weeks). The manufacturer agrees to a service fee schedule (e.g. \$10 per patient per PROM) depending on the disease complexity and criticality.

### 4. How does patient know about the warrantee?

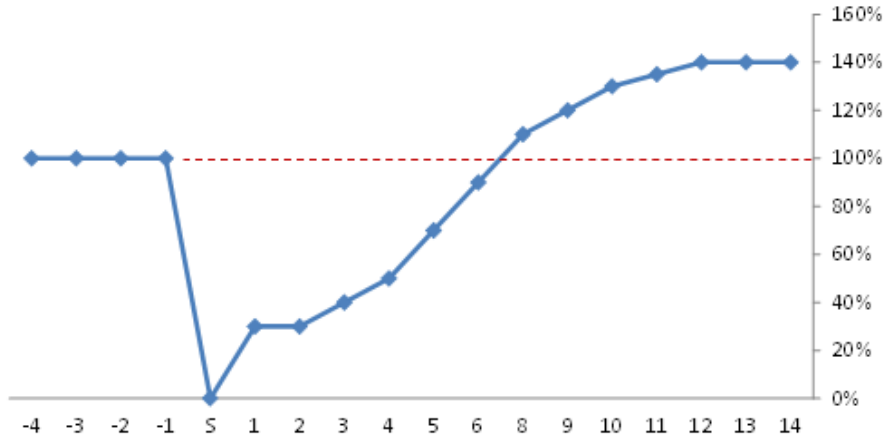
The physician will explain to the patient before the surgery to enroll in a mobile app in order to determine that the patient health condition allows for the surgery to take place. At that time, the physician may not have decided which device/brand will be used during surgery. Following the surgery, the doctor will inform the patient about this tracking app and encourage the patient to stay in touch with the physician. Once the device has been identified to the mobile app, the app will explain to the patient that the service is reimbursed by the manufacturer. In case there is no manufacturer warrantee, the app will ask if the patient would want to pay for the services. If the patient declines, then the physician may offer to monitor the patient free of charge.

### 5. Services provided

The physician is to review patients on a regular basis. Using a mobile app makes the review process efficient and convenient. The app will track all patients treated by the physician and compare their health score to what is the expected outcome range for the relevant patient cohort. Patients who are trending below expectations will be highlighted so physicians can review in more detail. The physician can then decide if the patient should see a doctor or even come back for a follow-up visit. The physician will be alerted to patients with significant or rapid declines in reported health (triage). The physician activities on the app are recorded as proof of service delivery. The app will detect superficial usage and alert the doctor. To avoid “gaming schemes” physicians earn their fees as long as they interact with the mobile platform with reasonable cadence, time and depth. The platform can easily track physician usage, how many clicks per session, length of session etc. All this will be used to document that real service was provided to justify the service fees.

## 6. Expected Outcome Curve (EOC)

The patient outcome is measured using a PROM which is a series of questions (e.g. ICHOM, SAQ-7, EQ-5D, Rose) modified to the specific disease and therapy. The responses are converted to a single patient score. The patient records a pre-op baseline indexed to be 100%. The patient then records responses during recovery and the warranty coverage period.

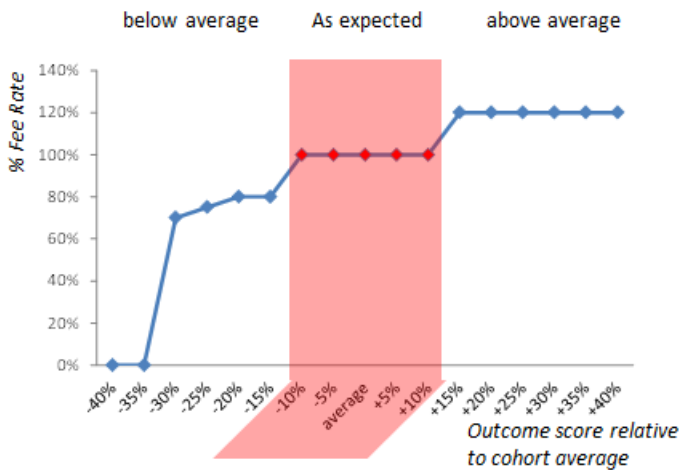


Using comparable patient characteristics (age, gender, comorbidities) a cohort average is compiled. This becomes the so called EOC “expected outcome curve”. Any patient is compared to EOC. The cohorts can be defined more and more narrowly as the patient population increases. Also the cohort curve might change over time as more patients enjoy longer physician attention and improved outcomes.

## 7. Service Fees

The manufacturer agrees to a service fee schedule (e.g. \$10-25 per patient per PROM upload) depending on the disease complexity and criticality.

The physician fees are based on patient outcomes. If patient outcomes are as expected (EOC +/- 10%), the physician will the nominal fee rate. If the patient exceed expectations (>10%), the physician will receive +20% increased fee. If the patient trails below expectations (<10%), the physician will receive -20% reduced fee. The % increase / decrease may be adjusted to a point such that physicians start paying attention to patient outcomes.



## 8. No-warranty reimbursement

Once the warranty period is expired the physician has the option to continue to monitor free of charge (and receive the data) or the patients can pay physicians out-of-pocket. Similarly, if the patient received a device that was not covered by a PACS warranty, the patient has the option to self-pay or the physician as the option to provide monitoring services free of charge.

## 9. What the warranty covers

The warranty covers periodic review of patient data by the physician and consultation (e.g. recommendation to make appointment with a doctor or to recall patient). The doctor may remind the patient to take medicine as prescribed or refill a prescription. The doctor may offer advice regarding exercise, diet or other lifestyle choices. The doctor may comment on the health status of the patient.

#### 10. What the Warrantee does not cover

The doctor will not administer or practice medicine using the mobile app. The doctor will not change any prescription or ask the patient to stop or take any prescription drug. The use of the mobile app does not increase the liability of the doctor.

The doctor is not obligated to review every patient response to every question. The doctor is not obligated to response to every question or issue raised by the patient. The mobile app also does not guarantee a maximum response or review time to the patient.

#### 11. Premium service (VIP)

The physician may assign VIP (Very Important Patient) status to certain patients. These patients can be filtered to more closely track their status. The doctor may allow patients to upgrade to VIP level, increasing cadence of physician review and faster response. Upgrade may come with additional charges to patient.

#### 12. Risk Sharing and further Extension of Warrantee

**Manufacturer Risk:** Option to fund this in China from reducing distribution (dealer) margin (i.e. raising price to dealer). Manufactures can ask distributor to reduce certain distributor expenses and let manufacturer cover it with this service warrantee. Now physicians will have to work on good outcomes to earn this kind of clinical outcome fee. Manufacturer is providing the warrantee and is paying for the expenses associated (physician time). Manufacturer pays more for physicians achieving better results and less for physicians with below-average results. So good outcomes cost more for the manufacturer. That is kind of reverse to how VBHC normally reduces manufacturer margin for poor outcomes. In this case Manufacturer wants to reward physicians for better outcomes.

**Provider / physician risk** is embedded in the warrantee: reimbursement is higher for better outcomes and lower for worse outcomes. Manufacturer can adjust the elasticity and see what motivates physician focus on outcomes.

**Patient Risk:** Given that patients in China are faced with big out-of-pocket expenses, the manufacturer may choose to offer some sort of reimbursement for poor outcomes. For example a subsidy for follow-on treatment (e.g. 1000 RMB per week for extended treatment if outcome is -30% of EOC). So poor outcomes actually result in less profit for manufacturer.

### 13. Warranty accounting

At the time of surgery when the warranty is activated, the manufacturer accrues for the expected warranty expense. The manufacturer should take into account that not every warranty that is activated will be claimed by the patient or claimed in full. The technology provider operating the mobile app will on a monthly basis provide an invoice to the manufacturer for all the warranty claims made by patients who underwent procedures using the manufacturer product. The invoice will further detail all physician services provided during the month to different patients.

### 14. Acronyms

EOC Expected Outcome Curve

EQ-5D EuroQol five dimensions questionnaire

ICHOM International Consortium for Health Outcomes Measurement

PACS Patient After-Care Service

PROM Patient Recorder Outcome Measures

QoL Quality of Life

SAQ-7 Seattle Angina Questionnaire-7

VIP Very Important Patient