# The evolution of critical illness insurance product design on the Polish insurance market in the context of international trends

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Abstract. The first critical illness insurance was sold in 1983 in South Africa. As was determined in the research process, the first critical illness insurance in Poland was commercialised in 1995. Since that time, it has become a standard insurance cover offered in many markets around the world. This type of insurance has also achieved an established position in the product range offered by domestic insurers especially as an additional cover to life insurance policies. The purpose of this paper is to reconstruct and present the evolution of critical illness cover in the product range domestic insurers offer from the product design point of view. The international background of the analysis applies primarily to those markets which have significantly affected the worldwide development of critical illness insurance products (South Africa, United Kingdom, the United States, Australia and East Asia). The author tries to generalize the dimensions of the product development which were identified as dominant. The time scope of the analysis involves the period between introduction of the first critical illness insurance onto the Polish insurance market and January 2017.

Keywords: health insurance, critical illness insurance, insurance product design, Polish insurance market.

JEL Codes: G22, N24.

#### 1. Introduction

Public opinion research has shown that in the area of health, those that arouse the greatest fear among Poles are cardiovascular diseases (25% of those surveyed), while there is significantly less anxiety about cancer ("only" 9% of respondents)<sup>2</sup>. For decades, cardiovascular diseases have been responsible for over 40% of deaths

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<sup>&</sup>lt;sup>2</sup> Survey "*Ocena stanu zdrowia Polaków*" [Evaluation of the health of Poles] conducted using the CAPI method by Millward Brown from 5-10 April 2013 on a representative group of over 1000 individuals aged 15-75 [Rynek Zdrowia 2014].

annually [GUS 2017, p. 324]. Among cardiovascular diseases, the most common causes of death are coronary artery disease and cerebrovascular disease. Cancer thus places second among the causes of death of people in Poland, nevertheless with an increasing trend in the overall structure of mortality (17.1% in 1980 vs. 27.4% in 2015) [GUS 2017, p. 324]. The scale of this growing cancer problem is shown not only by the number (or percentage) of deaths, but also the number of new cases and the number of people living with a diagnosis. In 2014, there were 159,000 new cases noted in Poland and over 574,000 people living with cancer identified in the previous ten years, of whom over 364,000 had been diagnosed within the previous five years [Wojciechowska, Olasek, Czauderna, Didkowska 2016, pp. 3, 12].

In the European Union (EU-28) as well, clearly the most frequent causes of death are cardiovascular disease and cancer. According to the most recent data, in 2014 cardiovascular disease was the cause for 126 deaths per 100,000 of the population of the EU-28 countries, whereas the mortality rate for cancer was on average 262 deaths per 100,000 [Eurostat 2017].

The genesis of critical illness (CI) insurance, also called a dread disease policy, is linked precisely with the incidence of circulatory disease and cancer as well as the financial consequences for households caused by the illness of one of its family members. The standard product design was based on a catalogue of defined events. The first cover sold in South Africa in 1993 guaranteed benefits in the event of a malignant tumour, heart attack, stroke, or the need for coronary artery bypass surgery [The Insurance Hall of Fame, undat.].

The purpose of this paper is to present the evolution of critical illness insurance on the Polish market and, strictly speaking, in the product range domestic insurers offer. Reconstruction of the changes was thus made omitting foreign insurers. Evolution is understood as the process of transformation and is regarded as synonymous with development. The subject of research was critical illness cover on the micro scale, i.e. as an insurance product, as opposed to the macro scale where insurance can be identified with a social institution, within which a product constitutes only one component. [Michalak, undat., pp. 5-10; Petin 1992, p. 165]. Product design is analysed above all based on the extent of cover<sup>3</sup>.

The title of this paper suggests a comparative analysis of Polish and international experience. As mentioned above, critical illness cover originated in South Africa. It next developed in the British (1986), Australian (1987), American (1988), and East Asian markets (1988) [Munich Re 2011, p. 5; König 2011]. The international context of the analysis thus refers above all to those markets which are regarded as important for the development of the insurance studied. Reconstruction of the international experiences will take the shape of generalisation of the dominant dimensions of product development.

Identification of the changes in the product design of critical illness insurance also requires definition of the time period of the research. Recognition of the changes

<sup>&</sup>lt;sup>3</sup> A separate area for research, not considered in this paper, in the development of critical illness insurance products could be e.g. the causes of the changes observed.

applies to the time frame between the commercialisation of the first products of this insurance and January 2017. The research undertaken refers mainly to comparison of the dominant product solutions at the two outermost points in time and to draw conclusions on this basis. This paper thus is more of a static analysis (a "comparison of two snapshots"), partially considering the dynamics of the product transformation over the research period in its entirety.

Research into the development of critical illness insurance was conducted through critical analysis of the domestic and foreign subject literature, including publications in academic journals<sup>4</sup>, conference proceedings and, in particular, popularising industry publications<sup>5</sup>. The results of this review of domestic academic publications shown in this text in the footnotes, allow one to conclude that critical illness insurance, a few exceptions aside, practically is not a subject of broader (comprehensive) academic research, neither from a product point of view nor – as opposed to the literature in English – cf. [Gatzert, Maegebier 2015, p. 256] – from a point of view of an actuarial analysis or insurance risk assessment.

Regarding the analysis of the current design of critical illness insurance on the Polish market, the empirical material was constituted by the General Terms and Conditions of Insurance (GTC) of individual products offered by domestic insurers. It should be remembered that the GTC constitute "solely" a medium for standard product information, de facto the prototype of the final insurance product. This is created only with the participation of the insured pursuant to a specific insurance policy. Insurance contracts protected by insurance confidentiality cannot constitute source material for the research undertaken here. It was determined that in January 2017, 22 out of 27 domestic insurers offering products in the life branch of insurance, provided for individual critical illness insurance.<sup>6</sup> Some companies offered more than one product of the type studied here. The justification for the analysis based on the individual insurance offered by life branch is found in section 2 below.

## 2. Insurance product design – main trends on foreign markets

Critical illness insurance ensures payment of a flat sum benefit in the case of diagnosis of a disease entity listed and defined in the policy. After receiving the benefit, the policyholder is free to spend it as she/he pleases. Although

<sup>&</sup>lt;sup>4</sup> The inquiry included back editions (since 1990 or the first edition, if it appeared after 1990) of such journals as *Wiadomości Ubezpieczeniowe*, *Prawo Asekuracyjne*, *Prawo, Ubezpieczenia*, *Reasekuracja*, *Przegląd Ubezpieczeń Społecznych i Gospodarczych* (subsequently appearing as *Przegląd Ubezpieczeń Społecznych i Zdrowotnych*).

<sup>&</sup>lt;sup>5</sup> Such publishers include *Miesięcznik Ubezpieczeniowy*, *Dziennik Ubezpieczeniowy* and the website of *Gazeta Ubezpieczeniowa* (gu.com.pl).

<sup>&</sup>lt;sup>6</sup> In alphabetical order, using abbreviated names, these were Aegon Życie, Allianz Życie, Aviva Życie, Axa Życie, Compensa Życie, Concordia Capital, Ergo Hestia Życie, Europa Życie, Generali Życie, Inter-Życie, Macif Życie, MetLife, Nationale-Nederlanden, Open Life, PKO Życie, Polisa Życie, Pramerica Życie, PZU Życie, Signal Iduna Życie, Uniqa Życie, Vienna Life (only terminal illness), Warta Życie. Pocztowe Życie was omitted on account of the very limited (in fact micro) extent of cover.

the intent of the cover designers is that the funds paid out are to make it possible for the policyholder to finance the costs of treatment, the design of this insurance in no way guarantees / imposes that the funds received by the policyholder are put to use for medical purposes.

As long as this insurance has been in existence, an enumerated event with guaranteed benefit did not only apply to disease entities, but also to surgical procedures, and today also to various forms of disability. CI insurance is most frequently offered as a rider policy to some type of life insurance, although there is no obstacle to its operating as a stand-alone policy. From the point of view of a guaranteed benefit, critical illness cover guarantees either (1) payment of a separate (additional) benefit with no effect on the insurance sum from the life (main) insurance policy or (2) payment of one (joint) sum for the life insurance policy and the critical illness cover as well. In the latter case, CI cover is called an accelerator (in part or in entirety) of the benefit from the underlying life insurance policy [Munich Re 2001, pp. 7-11; Reynolds 2016; Stroiński 2003, p. 271]. In the second case, if the diagnosis of the critical illness occurs earlier than the death of the policyholder (by any cause), the paid benefit from the CI insurance reduces the sum of the remaining cover in the event of the death of the policyholder.

Reconstructing the main tendencies on foreign markets, beginning at the time of the first commercialisation of the insurance in question, the following product transformations can be identified<sup>7</sup>:

- extension of the catalogue of qualified diseases from the "big four", i.e. heart attack, stroke, malignant tumour and bypass surgery, to several dozen disease entities that constitute the extent of cover of the insurance;
- design of "dedicated" insurance products this concept includes insurance targeted toward a particular group of clients or a narrowly defined life situation. With regard to critical illness insurance this occurs in the form of offering products profiled by gender (separate products for women and for men), age (e.g. for children), or by profession (e.g. for teachers, for medical professions). In this spirit one can also evaluate the return to the prototype of critical illness insurance and the offer of cover for a single type of disease, which in market practice leads de facto to cover for cancer;
- Giving up the catalogue of illnesses in favour of listing the attributes of disease more generally (e.g. incurability leading according to the current state of medicine to mortality within a certain time → terminal illness cover) or traits of the policyholder (e.g. associated with the inability to independently perform certain activities of daily living → chronic illness cover);
- the transition from cover for the first incidence of illness to cover for multiple incidences and popularising this second type of insurance. Because of the significant rise in the level of technical risk, the design of products for multiple incidences of illness is accompanied by introduction of additional conditions that

These results are the synthesis of in-depth analysis of the development of critical illness insurance on foreign markets [cf. Osak 2017] and literature referenced there.

- eliminate the interdependence of diseases listed in the catalogue of benefits (e.g. creation of a matrix of exclusions or groups of correlated diseases and classes, with the reservation that from each class there is a right to one payment only);
- extension of the primary coverage with an additional clause for example a clause being a surrogate for multiple benefits insurance (e.g. reinstatement clause, renewable term clause or buy back option to enable a restoration of the insurance sum), a clause related to the payment of premiums (premium waiver, (partial) return of premiums in the case of the expiration of the insured period without any benefit payment) and a clause regarding support services (e.g. fitness/wellness, or preventative medicine benefits).

## 3. Critical illness insurance offered by domestic insurers – reconstruction of the changes

While bearing in mind that the first critical illness insurance policy was concluded in 1983, the natural turning point in the analysis of the development of critical illness insurance offered by national insurers can be seen as the beginning of the systemic transformations in Poland and the creation of the legal conditions for the establishment of a market economy, including the insurance market. The formation of the insurance market in Poland is linked to passage of the Act on the Insurance Activity from 28 July 1990.

The starting point for the considerations presented in the next section of this paper is the perceptual judgement that the development of critical illness insurance in the world was and is linked with the creation of life insurance. This explains the analysis of the evolution of the product based on the general terms and conditions of insurance offered by insurers in the life branch business. Moreover, this perception together with the domestic legal regulations is important insofar as it explains why the first mentions of critical illness insurance being offered in Poland appear in the industry press only after 1995.

Ever since the insurance market in Poland was built, the statutory division of insurance into branches, groups and types has been in effect and resulting from that, what is known as the separation principle. This means that domestic insurers may not simultaneously operate in the first branch (life insurance) and the second branch (other personal and property insurance). The first law regarding the insurance business in the category of life insurance provided for only three groups of insurance, namely life insurance (group 1), marriage insurance (group 2) and life insurance linked to an investment fund (group 3) [Appendix to the Act of 28 July 1990]. Thereby in Poland, did not exist the legal basis for insurance undertakings to offer critical illness insurance. This possibility appeared with passage of the amendment of 8 June 1995 which expanded the catalogue of groups in the first branch to include annuities (group 4) and accident and sickness insurance (group 5) if these supplement the kinds of insurance specified in groups 1 to 4. Critical illness insurance is one of the components of this last category.

One of the leading authors of domestic publications on life insurance (and also on personal insurance more broadly) wrote in 1996 that "more and more frequently, 'pure' life insurance is supplemented with additional benefits in case of accident or in case of sickness" [Stroiński 1996, p. 7/125]. As the most frequently appearing additional option in Poland he listed at that time benefits in case of death resulting from an accident, benefits in case of disability resulting from an accident, benefits in case of inability to work (permanent disability), waiver of payment of premiums because of an inability to work, and – interesting in the context of the topic of this paper – benefits in case of illness [Stroiński 1996, p. 7/126].

It is justified to presume that at that time, critical illness insurance was practically non-existent in the product range offered by domestic insurers. In Stroiński's considerations, one looks in vain for an example of this kind of product on offer, whereas while discussing other types of life insurance the author does not refrain from making references to examples of market solutions. Moreover, in another – it can probably be said without exaggeration – historic insurance publication in the domestic publishing market of that time, namely the *Vademecum pośrednika ubezpieczeniowego* [The Insurance Agent's Handbook] edited by Tadeusz Sangowski, the authors in their discussion of types of additional benefits in life insurance do not even mention "benefits in case of illness" [Sangowski 1996, pp. 204-206], as could be found in Stroiński. It also does not appear in the section of the book devoted to the characteristics of the product range offered by insurance companies of the time [Sangowski 1996, pp. 206-212].

Study of the publications from the second half of the 1990s, including in particular by publishers of guides as well as popular science periodicals<sup>8</sup> made it possible to conduct a deeper analysis and to establish a few findings regarding the product range and design of critical illness insurance in its early phase of development in Poland.

The first provider to offer traditional CI insurance in Poland was Polisa Życie SA. Formally the product was introduced in July 1995 under the trade name "POLISA 100" [Polisa Życie 1995]. This was life insurance under which the policyholder could expand the cover with two riders, i.e. the risk of permanent or partial disability or the risk of becoming ill with cancer, a heart attack, stroke, or renal failure. Interpretation of the GTC provisions leads to the conclusion that this cover was an insurance that guaranteed accelerated payment of the sum insured in the event of death of the policyholder. The insurer, in case of diagnosis of one of the four listed diseases, guaranteed payment of 100% of the sum. The occurrence of an indemnifiable event was not subject to any additional conditions beyond the presentation of a medical diagnosis and passage of 9 months grace period. Together with the payment of the sum insured, the insurance protection were expired. This insurance was an individual

<sup>&</sup>lt;sup>8</sup> Aside from the domestic sources already called upon, the following were also used: [Polski rynek ubezpieczeń życiowych... 1999; Dziubińska-Michalewicz 1998; Gadkowski 1998; Pieczykolan 1997; Rynek ubezpieczeń w Polsce... 1996]; a set of products available published in Gazeta Ubezpieczeniowa as well as Asekuracja&Re: pierwszy polski miesięcznik ubezpieczeniowy, and archival texts of general terms and conditions of insurance.

one<sup>9</sup>, which is interesting insofar as at the threshold of development in the insurance market in Poland, the clear majority of premiums written were generated by group insurance for employees.

Table 1. Critical illness insurance offered by domestic insurers in 1997-1998

Abbreviated name of the provider	Brief product description	
INDIVIDUAL INSURANCE		
POLISA ŻYCIE	<ul> <li>rider to life insurance "Polisa 100", "Polisa 100 Plus"</li> <li>critical illnesses: cancer, heart attack, stroke, renal failure</li> <li>accelerated benefit type (100%)</li> <li>grace period: 9 months</li> <li>protection period: until the policyholder turned age 64 maximum</li> </ul>	
POLISA ŻYCIE	<ul> <li>rider to life insurance and whole life "Premium"</li> <li>critical illnesses: cancer, heart attack, stroke, renal failure</li> <li>insurance with a benefit in addition to the primary death benefit (30% of the sum insured)</li> <li>requirement that the policyholder survives 30 days after diagnosis of a critical illness</li> <li>cover for one incidence of illness</li> <li>grace period: 9 months</li> <li>protection period: until the policyholder turned age 65 maximum</li> </ul>	
WARTA VITA	<ul> <li>rider to life insurance and whole life "Pewny Zysk" [Sure Profit]</li> <li>right to expand protection for the insured sum that exceeds a specific level (30,000 PLN)</li> <li>critical illnesses: cancer, heart attack, stroke, renal failure, major organ transplant (if the policyholder was the recipient)</li> <li>insurance with a benefit in addition to the primary death benefit (30% of the sum insured)</li> <li>grace period: 6 months</li> <li>protection period: until the policyholder turned age 55 maximum</li> </ul>	
AMPLICO LIFE	<ul> <li>rider with the trade name "Zdrowie" [Health]</li> <li>critical illnesses: cancer, heart attack, vascular disease requiring surgical treatment, stroke, renal failure, organ transplantation (lungs, liver, pancreas, kidney), vision loss</li> <li>insurance with a benefit in addition to the primary death benefit (100% of the sum insured)</li> <li>cover for one incidence of illness</li> <li>grace period: 6 months</li> <li>requirement that the policyholder survives 30 days after diagnosis of a critical illness</li> <li>age of the policyholder at the time the policy is issued: 20-55(60) years</li> </ul>	

<sup>&</sup>lt;sup>9</sup> The same version as an additional option for critical illnesses appeared also a little over a year later in the subsequent individual insurance of Polisa Życie SA, [cf. Polisa Życie 1996].

Abbreviated name of the provider	Brief product description	
GROUP INSURANCE		
WARTA VITA	<ul> <li>benefits as part of "Grupowy Fundusz Emerytalny" [Group Retirement Fund]</li> <li>critical illnesses: cancer, heart attack, stroke, renal failure, major organ transplant (if the policyholder was the recipient)</li> <li>insurance with a benefit in addition to the primary death benefit (30% of the sum insured)</li> </ul>	
NATIONALE NEDERLANDEN	<ul> <li>supplemental option to insurance with an investment fund</li> <li>critical illnesses: stroke, cancer, heart attack, renal failure, bypass</li> <li>insurance combining accelerated benefits from the main policy and additional benefits – the value of the benefit was 50% of the sum insured in case of death and was not deducted from the sum insured owed in case of death under the condition that the policyholder survived at least half a year after falling ill; if death occurred earlier then the critical illness insurance acted as an accelerator and the payment for death constituted the remaining 50% of the sum insured.</li> <li>period for the supplemental policy: 5 years minimum</li> <li>protection period: until the policyholder turned age 65 maximum</li> </ul>	
PZU ŻYCIE	<ul> <li>benefits as part of the "Życie" [Life] policy, a supplement to the insurance "Pogodna Jesień" [Pleasant Autumn]</li> <li>critical illnesses: heart attack, bypass, cancer, stroke, renal failure</li> <li>insurance with a benefit in addition to the primary death benefit (30% of the sum insured)</li> <li>age of the policyholder at the time the policy is issued: up 50 years</li> <li>protection period: until the policyholder turned age 55 maximum</li> </ul>	
POLISA ŻYCIE	<ul> <li>benefits as part of "Rodzinne Grupowe Ubezpieczenie na Życie" [Family Group Life Insurance]</li> <li>critical illnesses: cancer, heart attack, stroke, renal failure</li> <li>insurance combining accelerated benefits from the main policy and additional benefits – the value of the benefit was 30% of the sum insured in case of death and was not deducted from the sum insured owed in case of death under the condition that the policyholder survived at least 30 days after falling ill; if death occurred earlier then the critical illness insurance acted as an accelerator and the payment for death constituted the remaining 70% of the sum insured.</li> <li>grace period: 9 months</li> </ul>	
ATU-LIFE	<ul> <li>benefits as part of "Grupowe Ubezpieczenie na Życie" [Group Life Insurance]</li> <li>cover for multiple incidences of illness</li> <li>insurance with benefits in addition to the primary death benefit: in the first incidence of critical illness the benefit was 50% of the sum insured</li> </ul>	
РВК ŻҮСІЕ	<ul> <li>supplemental option to "Grupowe Terminowe Ubezpieczenie na Życie" [Group Term Life Insurance] and "Grupowe Ubezpieczenie na Życie z Funduszem Inwestycyjnym" [Unit-link Group Life Insurance]</li> <li>insurance with benefits in addition to the primary death benefit (50% of the sum insured)</li> </ul>	

Source: Author's own work on the basis of sources in references as well as [Cenne życie...1998; Życie na wagę polisy... 1998, Życie na wagę polisy-część II ...1998; Polisa Życie 1997; Polisa Życie 1997a; Polisa Życie 1995].

Since 1996, there has been a clear growth in interest from investors in establishing life insurance companies and at the onset of that year a steep rise in the number of insurance companies with foreign capital has been recorded [State Insurance Supervision Office (PUNU) 2001, pp. 15, 25]. As a result, it is not surprising that the reports from which one can deduce the significant expansion of the number of critical illness insurance products offered are dated from 1997-1998. This was assuredly in part caused by the growth in the number of potential providers as well as the transfer of know-how from international markets by foreign shareholders. Table 1 presents systematically the critical illness insurance products offered in 1997-1998.

At the end of 1998, in the category of life insurance there were twenty-four insurers operating in Poland [PUNU 2001, p. 25]. This information, together with the tabular arrangement leads to the conclusion that only a few providers guaranteed protection in case of critical illness. In this period, the dominant rider to cover in case of death was insurance in case of permanent inability to work or permanent disability<sup>10</sup>.

Analysing the information contained in Table 1, one may state that the initial phase of the development of critical illness insurance in Poland, as opposed to foreign markets, was dominated by insurance with benefits in addition to the death benefit. In this context, it should not come as a surprise that the clear majority of products designed were then covering a single incidence of illness. In this way, the technical risk was limited, and insurers for calculation of premiums knew the maximum value of potential claims from the insurance policy.

The standard/primary catalogue of covered events came down to four events, i.e. cancer, heart attack, stroke, and renal failure. The products of that time rather rarely provided for payment for coronary artery bypass surgery, which again made them different from the prototypical solutions from abroad. Noteworthy is the fact that even with the small number of providers, insurers began to use a rather natural way of rendering their product more attractive than the competition, namely by adding other types of serious events to the extent of cover (e.g. organ transplantation).

As a result of the design of insurance with additional benefits, insurers, much as in foreign markets, from the beginning of the commercialisation of the insurance in question limited the extent of guaranteed cover through the introduction of the condition of a "survival period" [Munich Re 2001, p. 16]. By the same token, for the occurrence of an indemnifiable event, diagnosis of an illness after the effective date was not sufficient, but additionally it was required that the policyholder survives for a period stipulated in the policy (typically 30 days) after establishment of the diagnosis. As Stroiński wrote, the point [of this] insurance is not to give preference to a few causes of death and payment of a higher benefit in case of death by one of these causes, but rather to pay a benefit to a living person who is seriously ill [Stroiński 2003, p. 273], and the extended period of illness causes increased financial demands.

 $<sup>^{\</sup>rm 10}$  On the basis of analysis of the publications cited as in Table 1.

The basis for determining the amount of the benefit for critical illness, both in the additional benefit variant as well as in the accelerated benefit variant, was in all cases the sum insured in case of death. The flat-rate benefit from CI insurance was always – different in case of various insurers – a percentage of the primary sum insured. Insurers did not then directly indicate an amount (value) for the benefit in case of critical illness. This was also a result of the design of CI cover products solely by life insurance providers. By the same token, for formal and legal reasons, critical illness insurance was always a rider (optional) policy to a life insurance policy, and not a stand-alone policy.

Critical illness insurance was much more frequently a supplement to group insurance policies than to individual ones, which was a result of the dominance of the group form of life insurance generally (especially employee group insurance). One can thus speak in some ways of a reversal of the time sequence of the appearance of the two forms of distribution of critical illness insurance (group and individual). Insofar as in the holistically viewed history of commercial insurance the appearance of group insurance is preceded by the operation of individual insurance [cf. Szczęśniak 2003, pp. 30-35], in the contemporary history of life insurance in Poland (including critical illness insurance) the phenomenon appeared rather in reverse order. Thus, the appearance of individual critical illness insurance can be seen as an indicator of the development (progressive changes) of the insurance in question [Osak 2009, pp. 115-119]. This state of affairs justifies, at least partially, the choice of the general terms and conditions of individual insurance as the empirical material for research into the evolution of the design of CI cover for its early period.

An intense development of critical illness insurance occurred from 1999-2003, which can be concluded at least on the basis of analysis of the content of articles and press reports posted on the Gazeta Ubezpieczeniowa website. 11 It can be easily seen that the later boundary of the time frame coincides with the substantial beginning of the reform of the public health insurance system in Poland 12. Subsequent academic publications [Więckowska 2006; Osak, Więckowska 2005] then point to the grounded practice of insurers in offering critical illness insurance and the expansion of the catalogue of illnesses covered. In the first decade of the twenty-first century, insurers have moved away from apportionment of a primary extent of cover, then a catalogue of six critical illnesses (malignant cancer, stroke, heart attack, bypass, renal failure, major organ transplant) in favour of a single expanded catalogue consisting of a dozen

<sup>&</sup>lt;sup>11</sup> Among academic articles published in the pages of the journals referenced above, the only one about the standard design of critical illness insurance that appeared at the time was in fact [Szczepańska 2000, s. 14-17].

<sup>&</sup>lt;sup>12</sup> Since 1 January 1999 rules have been in effect that are specified in the Public Health Insurance Act from 6 February 1997 (Dz.U. [Journal of Laws] No. 28, item 153), extensively amended still during the *vacatio legis* – see the amendments to the Public Health Insurance Act as well as several other laws of 18 July 1998 (Dz.U. [Journal of Laws] No. 117, item 756), the amendments to the Public Health Insurance Act of 9 November 1998 (Dz. U. [Journal of Laws] No. 144, item 929) and the amendments to the Public Health Act as well as several other acts from 16 December 1998 (Dz. U. [Journal of Laws] No. 162, item 1116).

or so disease entities. The initial standard of diseases expanded to include such events as loss of vision, speech, or hearing, loss of a limb, severe burns, Creutzfeldt-Jakob disease, multiple sclerosis, aplastic anaemia, coma or HIV infection<sup>13</sup> (through performance of professional duties or through a transfusion).

The expansion of the catalogue of benefits is still most visible in product design. Currently, the widest catalogues of critical illnesses offered on the market by domestic insurers include 40 events. At the opposite pole are products that guarantee payment with regard to a few (4-6) critical illnesses. Insurers choose two ways of shaping the extent of this cover: either they offer one catalogue of illnesses or it is left to the policyholder to decide by making a choice between a basic catalogue or an expanded one. In the latter – less frequent [cf. Jedrzejewska-Wnuk 2013, pp. 21-22] – case, the basic catalogue includes from 7 to 20 events, whereas the content of the expanded catalogue includes from 17 to 36 illnesses. Aside from the previously mentioned illnesses, one can now find insurance providing cover for burns, Alzheimer's disease, Parkinson's disease, bacterial encephalitis, essential hypertension, chronic organ dysfunction, sepsis or severe head trauma. Among the more "exotic" diseases, there appeared falling ill with viral haemorrhagic fever, elephantiasis, and cerebral malaria. The addition of subsequent disease entities to the catalogue of indemnifiable events, given epidemiological data regarding the incidence of such diseases, may often be evaluated in the category of pure marketing. [Jedrzejewska-Wnuk 2013, pp. 28-31]. On the other hand, media references to the threat of an epidemic (or even a pandemic) of some diseases (e.g. swine flu in 2009, or viral haemorrhagic fever caused by the Ebola virus in 2014) are an incentive for insurance companies to expand the extent of cover or to create new critical illness insurance products - cf. [Antidotum na nowa grvpe... 2009].

Despite the expansion of the extent of cover, which varied among insurers, no efforts were undertaken to develop standard definitions of illnesses<sup>14</sup>. One may only hope that the high-profile legal proceedings by the Antitrust and Consumer Protection Office against PZU na Życie SA [President of the Office of Competition and Consumer Protection (UOKiK) 2010], which – after a court battle – ended with the imposition of a fine against the insurer for use in the GTC of a definition of heart attack that significantly narrowed the extent of cover and deviating from medical standards for diagnosis, may bring about that the definition of illnesses, while still very complicated, will be set on the basis of the standards of current medical practice.

<sup>&</sup>lt;sup>13</sup> It should be added that insurance in case of HIV/AIDS in the history of the development of critical illness insurance in Poland is the "primogenitor" of these policies. It was commercialised for the first time in 1998 by the Spółdzielczy Zakład Ubezpieczeń Westa [Westa Mutual Insurance Company] in Łodź on the basis of Resolution No. 52/88 of the Insurance Supervisory Board regarding the general terms and conditions of cover in case of AIDS-related illness – material found in the State Archive in Łódź under the name of the company: Zakład Ubezpieczeń WESTA SA Zarząd w Łodzi, file signature 1/40 (pp. 367-371). It must be emphasised that the cover was for various circumstances of infection, not restricted, as it is now, to transfusion, receiving a transplant or in the execution of professional duties. <sup>14</sup> Regarding the standardisation of definitions in the domestic literature, broadly [Gumna 2015; 2014].

In 2002, critical illness insurance for children appeared on the Polish market [Dygas 2002]. It has remained in the product range offered by domestic insurers, although one cannot say that it is a standard element of cover (it is offered by seven of the group of providers studied). In the majority of cases, insurance for children is not a "permanent" element of insurance cover for parents but may be concluded on the basis of a separate supplemental option. In establishing the maximum eligible age for a child, there were two solutions applied equally: cover until age 18 or cover to age 25. Not infrequently did insurers also introduce a minimum age requirement for a child to be eligible for cover, i.e. being from one to three years of age. The number of illnesses in the catalogues of "paediatric" illnesses ranged from 7 to 21 events<sup>15</sup>.

An example of dedicated insurance are also separate policies for cancer. On the Polish market, much like on foreign markets, we can observe the return to a product which is recognized as the classic prototype of CI insurance [Dinani et al. 2000, p. 6]. At first, policies for cancer were only available in Poland in a version for women for breast cancer of. Currently, separate policies for cancer diagnosis are found in the product ranges offered by Axa Życie, Compensa Życie<sup>17</sup>, Nationale-Nederlanden, and BZ WBK Aviva<sup>18</sup>. Cover profiled by gender for cancer apply to, in the case of women, also cervical cancer, cancer of the ovary, fallopian tube, vagina or vulva. Also a cover is available for malignancies that are characteristic for men, i.e. prostate cancer, testicular cancer, or penile cancer. Additional cover is not necessarily limited to cancers that are particular to one gender but may be expanded to all other cancers classified in the International Statistical Classification of Diseases and Related Heal Problems (ICD-10) under the blocks C00 to C97. Moreover, some insurers make it possible to expand cover to include preinvasive cancers or non-malignant tumours.

In the course of this research, the author did not encounter any offer of standalone CI insurance, which – for legal reasons – could be a product offered solely by insurers in the second branch in possession of a permit to operate in group 2. It was thus concluded that with regard to the design of guaranteed benefits on the domestic market, the dominant model remained distribution of CI insurance as a rider to another policy (here: life insurance) whereby the policyholder is entitled to receive

<sup>&</sup>lt;sup>15</sup> Pramerica Życie has in its product range a supplemental option of insurance for parents in the event of a child falling ill not only with a critical illness, but also or a hospital stay, operation, or death of a child. In the case of this product, the catalogue of critical illnesses includes as many as 32 illness events.

<sup>&</sup>lt;sup>16</sup> Cover for cancer was introduced into distribution in March 2003 after the case STU Ergo Hestia SA [*Femina...* 2004]. Cf. also [Kurzępa 2004, p. 30; Więckowska 2006].

<sup>&</sup>lt;sup>17</sup> Aside from the option for contracting cancer, the insurer offers a separate option for the treatment of malignancy.

<sup>&</sup>lt;sup>18</sup> Since April 2017 a separate additional option to life insurance, "Diagnoza Nowotworu" [Cancer Diagnosis], is also offered by MetLife [*MetLife realizuje...* 2017]. A policy for consequences of suffering from cancer called "Triumf" [Triumph] is also available on the Polish market and is offered by the foreign provider AIG Europe Limited Spółka z ograniczoną odpowiedzialnością Oddział w Polsce.

benefits with addition to that provided by the primary policy<sup>19</sup>. Among the products analysed, three are based on an accelerated life benefit, whereby it should be added, that acceleration in these is reserved only in the case of non-survival 180 days (or six months) after diagnosis. After the required survival period, cover then changes into a guaranteed additional benefit. The survival period as a condition for insurer liability has been from the beginning a standard parameter of regulating insurer liability. Aside from the exceptionally long period mentioned above, the remaining insurers set a thirty-day survival period (with the exception of one where the survival period is shortened to 20 days).

Supplementing of critical illness insurance may in practice take one of two forms. An insurer may add cover for critical illness as a permanent (integrated) element to life insurance. This solution is of course not very flexible from the client's point of view, who when deciding on a primary product is forced to take additional cover in case of critical illness. In the product range offered by domestic insurers this solution is rather on the margins (cf. e.g. numerous products of PKO Życie). Insurers choose the second formula of offering the protection of a supplemental, i.e. in the form of an additional clause/option, which the interested party (insurant) decides whether or not it will be added to the policy.

A fundamental change in the area of benefit design regards the commercialisation of products for multiple incidences of illness. They have achieved a permanent place "in the architecture" of the critical illness insurance market and as of today for certain are not a marginal design type for this sort of cover<sup>20</sup>. Among all of the group of products subjected to analysis, a little over half were offered as cover for multiple incidences of illness. Much as in foreign markets, there typically appear in the design of such products additional limits to insurer liability. On the domestic market, these are set as limits to the amount of payment (100-200% of the sum insured)<sup>21</sup> or limits on the number of payments (typically up to three events). Of course, regarding subsequent illnesses insurers, through very general rules of the GTC, do not guarantee cover for the same critical illness that was the basis for [an earlier] insurance benefit, nor regarding an illness related to the "original" illness or an illness resulting from the same pathological factors. In the area of eliminating liability for interrelated diseases, only two insurers made use of the method of grouping illness and a guarantee of one payment for each group, and one used a matrix of correlations (multiple event exclusions).

The dominant practice of domestic insurers has been to issue CI insurance as a term policy, in the clear majority of cases for a five-year period of cover [cf. Jędrzejewska-

<sup>&</sup>lt;sup>19</sup> For the sake of completeness, it should be added that critical illness insurance is sold in Poland also as a supplemental option to cover for the costs of treatment, and in this area products are offered not only by life insurance providers, but also by insurers in the second branch in the area of other personal insurance policies.

<sup>&</sup>lt;sup>20</sup> In a different way regarding the frequency of the appearance of cover for multiple incidences of illness wrote – in relation to what was offered in 2012 [Jędrzejewska-Wnuk 2013a, pp. 148-149].

<sup>&</sup>lt;sup>21</sup> In such cases, the setting of a maximum limit to the total value of benefits is accompanied by a percentage scale (gradation) of benefits with regard to each type of illness.

Wnuk 2013a, p. 148]. Thereby insurers provide themselves with the ability to not extend a policy for a given policyholder, and above all to recalculate premiums, which – even in the case of a guarantee of no re-evaluation of the medical risk – are subject to increase on account of the policyholder's higher age. One can thus state that domestic insurers use the restrictive (subject to the right to recalculate premiums) version of the clause regarding the extension of the period of cover also used in foreign markets.

In relation to the early 2000s, the maximum age of the policyholder, to whom insurers guaranteed issuance of insurance cover underwent extension. The period of protection lasts in the clear majority of cases up to the anniversary of the policy (or the year after) when the policyholder turns 65, whereas earlier that was normally to age 60. Nevertheless, in case of the incidence of illnesses highly dependent on age such as Alzheimer's disease or Parkinson's disease, frequently an element of insurance cover, an upper age limit to insurance cover still remains unsatisfactory [cf. Jędrzejewska-Wnuk 2013, pp. 30-31].

The standard for today's products is to set a separate amount of the sum insured, not directly linked to the amount of the guaranteed sum in case of death. In effect, the dependence between the amount of cover in the supplemental policy and the amount of the sum insured under the primary policy, dominant in the past, is currently a solution in decline. Frequently enough in the GTC a provision appears regulating the amount of the minimum sum insured for CI insurance. In such cases, insurers relatively often require a sum of at least PLN 10,000<sup>22</sup>.

## 4. Conclusion

Insurance practitioners indicate that critical illness insurance in Poland is attached to the majority of group life insurance policies [Kowalski 2014]. As a result of this fact, taken as the indicator of progressive change in this article is the change of the product design of individual insurance as a kind of higher stage of development in insurance (including critical illness insurance). The analysis conducted here allows one to state that also individual critical illness insurance over the course of over two decades found a solid place in the product range offered by domestic insurers. The further spread of this insurance will proceed along with the development of private health insurance. The entre time, this indicates the distribution of CI insurance as a rider to the primary policy (life insurance or health insurance). Nonetheless, supplementing health insurance with an option for critical illness insurance expands the group of providers to include insurers in the second branch. This fact creates a potential area for comparative research into the design of critical illness insurance as a supplement to life insurance or as a supplement to health insurance. However, marginal at the market level, the premiums written from health insurance causes that

<sup>&</sup>lt;sup>22</sup> A product is also distributed that offers three variants of a minimum sum insured: PLN 18,000, PLN 50,000 and PLN 150,000.

the appearance of significant differences and product innovations in CI insurance as part of supplements to health insurance is rather unlikely.

The universality of insurance availability is not necessarily accompanied by product recognition among potential consumers, or still further, the ubiquity of consumption of (individual) critical illness insurance. Data published by the Polish Financial Supervision Authority or the Polish Insurance Association do not permit quantitative characterisation of critical illness insurance policies, including those that constitute a supplement to life insurance. Aggregation of data from group 5 of the first branch thus leads to two subcategories, i.e. accident insurance and health insurance. These two categories are internally differentiated. Health insurance includes, aside from critical illness insurance, cover for hospital stays, cover for damage to health as a result of illness, and cover for surgery. Thus, referring to the available data, the question remains how many insured individuals hold the option for critical illness and what gross volume of premiums written are received on account to this product. At the end of 2016, insurance companies held in their portfolios nearly 1.17 million active health insurance policies, of which individual policies accounted for 70% [KNF 2016, Table D.1.a.b]. The number of insured individuals was 11.4 million, of whom as many as 10.6 million held cover as part of a group insurance policy [KNF 2016, Table D.1.a.b]. The gross premiums written received by insurers from health insurance were PLN 1.06 billion, of which 35% proceeded from individual policies [KNF 2016, Table D.1.a.b].

Results of public opinion surveys conducted for the Genworth Consumer Focus insurance group from 27-30 September 2013 by Ipsos MORI on a representative sample of 1012 Poles aged 16-60 show that in case of the need to cover medical costs not paid by NFZ [the National Health Fund] in excess of PLN 100,000, one in three Poles would be forced to turn to charitable and non-governmental organizations for help [Rynek Zdrowia 2014]. In the same study, 26% of respondents indicated that they hold a critical illness insurance policy. It should be noted, however, that PLN 100,000 as the sum insured in case of critical illness is a value that applies to a marginal percentage of policies. Moreover, cover currently applies to enumerated illnesses, and not any illness incurring prospective costs of treatment at a particular level. This "cost" approach to product design may be assessed in the context of proposals that appear in the literature abroad to move away from the creation of critical illness insurance on the basis of medical definitions of numerous diseases in favour of making insurer liability dependent on the occurrence of a "life changing event" for the policyholder [Reynolds 2015].

It emerges from the analysis performed here that in principle the changes in the design of the extent of critical illness cover offered by domestic insurers correspond to trends identified in foreign markets. A departure from these patterns is the practical absence of any use (other than a marginal one as part of cover for cancer) of an expansion of the primary extent of cover with an additional clause regarding support benefits.

In the view of the growing threat of falling ill with some serious lifestyle disease, one may accept that creation of insurance products that are adequate to the threat, as well as the promotion of their use in society, remains a challenge for domestic insurers. Some insurance market experts single out here a particular role for the development of supplemental products dedicated to cancer [Kalbarczyk 2015, p. 48]. Yet adequacy should be measured not only through the lens of the content of the catalogue of illnesses and their definitions, but also the size of the sum insured that is possible, as well as the adjustment of products to demographic trends related to the ageing of society. The question of price is also important from the perspective of the affordability of the product for a potential client. In this context, practitioners on foreign markets point to the importance of reducing comprehensive insurance cover and limitation of the "slackening" of the boundary conditions of insurer liability [Dreyer et al. 2013]. A chance to fulfil these postulates may be seen in the creation of an "oncopolis", as cancer is seen as likely to be the main cause of death in the future.

To conclude, it should be emphasised that the object described in this article comprised of products sold by insurers via traditional distribution channels. One may also see as an evolutionary change the means of distribution (at very least as part of bancassurance), which in turn may affect the design of the product offered. Market reports from the past two years confirm that the bank channel may play the role of a stimulant in the CI insurance segment in the direction of distribution of "essential" critical illness insurance without "packaging" them in the construction of primary (life insurance) policies as well as simplification of the extent of cover in favour of increasing the guaranteed sum insured [cf. BZ WBK AVIVA 2016; mBank 2015]. Consequently, comparison of the product solutions distributed by banks and through traditional distribution may constitute the next area for research.

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## **Abbreviations**

CI – critical illness; GTC – General Terms and Conditions of Insurance; ICD-10 – International Statistical Classification of Diseases and Related Heal Problems; PUNU – State Insurance Supervision Office (*Państwowy Urząd Nadzoru Ubezpieczeń*); UOKiK – Office of Competition and Consumer Protection.