



Policy Directive 2020-02-01

Title: Cryptocurrencies

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Program(s) Impacted: Elderly and Disabled Medical Programs

The purpose of this document is to provide immediate guidance on the identification, verification, and treatment of cryptocurrencies for the Elderly and Disabled Medical Programs.

A. Acquisition and Definitions

Cryptocurrencies, also known as digital currency or virtual currency, are digital assets that were designed to create an online medium of exchange using cryptographic functions to secure financial transactions. Cryptocurrencies function on decentralized networks meaning that not one single central bank or regulating authority controls the creation, distribution, or transaction of the currency. Cryptocurrencies rely on blockchains to monitor the validity of each cryptocurrency's "coins" by housing transaction data inherently resistant to modification making these funds nearly impossible to replicate or counterfeit. Some of the most common cryptocurrencies include, Bitcoin, Ethereum, and Litecoin; however, there are thousands of types of cryptocurrencies currently circulating in the market.

Like stocks purchased through the stock market, cryptocurrencies are bought and sold through a process known as day trading. This process is referred to in the same manner as stocks because, similar to the stock market, the cryptocurrency market is a continuous market ran worldwide. Day trading allows cryptocurrencies to be purchased outright from the virtual market; however, cryptocurrency can also be obtained through a process known as "mining".

Mining is a way to receive cryptocurrency through solving a series of mathematical problems. Mining requires a computer, an external hardware setup, and a special computer software program. To receive cryptocurrency through mining, multiple people worldwide attempt to solve a series of complicated mathematical problems via the mining software. Each receipt of cryptocurrency could require millions or billions of guesses at mathematical problems. The person to solve the final mathematical problem is the one to receive the cryptocurrency.

Once obtained, cryptocurrency is held in a digital "wallet". Comparable to a bank account, the digital wallet stores records of cryptocurrency transactions. These wallets are secured by use of a "private key" – a long sequence of alphanumeric characters. The private key is known only to the user and serves as the user's digital ID. The private key authorizes the user to spend, withdraw, transfer, or carry out any other transaction from his or her account. It is possible that

an individual may own multiple wallets. It is also possible that more than one type of cryptocurrency may be stored within a single wallet.

B. Treatment of Cryptocurrencies

Depending on how the cryptocurrency is stored, received, or disposed of, cryptocurrencies shall be treated following the existing provisions provided in the Medical KEESM. For example, cryptocurrencies received into an individual's wallet as payment for services or products may be either considered earned income if received from an employer or may be considered self-employment income if the individual meets the self-employed criteria. Cryptocurrencies received through mining as explained in section A. above shall be considered unearned income. Cryptocurrency stored in the individual's digital wallet shall be considered as an available resource. Cryptocurrency given away without reasonable compensation shall be considered a transfer of property subject to penalty.

C. Identification and Verification

Cryptocurrencies are not always easily identifiable. Due to the inherently private and anonymous nature of these assets, determining whether a consumer owns cryptocurrency can be difficult. Unless identified via a consumer's bank statement transactions or directly attested to by the consumer themselves, an individual may own cryptocurrencies for years without the agency ever having knowledge of such asset. However, once identified, additional information shall be requested from the consumer regarding their cryptocurrencies utilizing the following verification fragment below found on the E&D Specific tab of the Standard Text for Copy and Paste spreadsheet:

"We need proof of your cryptocurrency. Please provide statements from your digital wallet(s) for the month(s) of {Month of application through month of processing + Prior Medical if necessary}. These statements must show a running balance of all transactions that occurred in these months for each cryptocurrency owned. If any cryptocurrency coins were received in these months, please provide a written statement advising of how these coins were received (i.e. mining, exchange for services or products, gift, etc.). If any coins were disposed of in these months, please provide a written statement advising of where and how these coins were spent."

Because cryptocurrencies were developed with the goal of total anonymity for their users, it is next to impossible to determine the source or final destination of cryptocurrency coin transactions. Therefore, when an individual has received and/or disposed of cryptocurrency coins, self-attestation of the transaction details may be accepted as verification.

- i. In the instance that the applicant/recipient provides the requested statements from their digital wallet but does not provide a written attestation of the source of coins received in the months being reviewed, contact with the consumer shall be made via a phone call. If the consumer does not provide attestation of the source of coins received after the formal request or through contact, the case shall be closed due to failure to provide information necessary to determine eligibility.
- ii. If the consumer disposed of coins but did not provide an attestation of how or where the coins were spent, it shall be considered a transfer for uncompensated value. See section D.3 below for additional information regarding uncompensated transfers.

D. Valuation

1) Resource:

Some digital wallets may provide a real-time valuation of the cryptocurrency based on the amount of the individual's share of cryptocurrency while others may only provide the amount of the individual's share. However, in either situation, as the values of cryptocurrencies fluctuate constantly, and a digital wallet can house multiple types of cryptocurrencies, a complete breakdown of the individual's wallet(s) shall be obtained for all months applicable. The statement received should then be reviewed to determine what type of cryptocurrencies are in the wallet(s) in addition to whether any cryptocurrency received in that month shall be considered as income. If it is determined that the individual received coins that are to be considered income, the amount of coins received as income shall be deducted from the total amount of coins the individual owns for the specific cryptocurrency in that month. The amount of coins owned for the specific cryptocurrency that remain after this deduction shall then be valued utilizing the historical data of the cryptocurrency via a reputable trade publication. For eligibility, the remaining amount of coins shall be multiplied by the lowest share price in the month being reviewed. Likewise, for a Community Spouse Resource Allowance, the remaining amount of coins shall be multiplied by the highest share price in the month being reviewed. When multiple cryptocurrencies are stored in a single digital wallet, each cryptocurrency shall be valued independently and entered into the eligibility system as such. A liquid resource type of "Liquid Resource – Other" shall be used with a description of "Countable Resource" for each type of cryptocurrency owned.

Example: Evelyn applies for Long Term Care medical assistance on 11/12/2019. Evelyn's bank statements show withdrawals from Coinbase.com, an online digital wallet used for storing cryptocurrencies. The worker requests statements from Evelyn's wallet for the months of 11/2019 and 12/2019 and identifies that in the month of November, Evelyn owned two (2) coins from Monero and one (1) coin from Bitcoin. Based on this information, the worker researches the historical data for Monero and Bitcoin. In November, the lowest monthly share price for Monero was \$46.03. This amount is multiplied by 2 resulting in a valuation of \$92.06 for this month. The lowest monthly share price for Bitcoin in November was \$6,617.17. Because Evelyn only owns one (1) coin from Bitcoin, this amount is used as the value for the month of November. In December two additional coins were received from Monero through mining; however, because these coins are to be considered unearned income, the valuation for the month of December is based on the two (2) original coins. This results in a \$88.78 valuation. Evelyn did not receive any additional coins from Bitcoin in December; therefore, her coin from Bitcoin is valued at \$6,540.05 for this month. Altogether, for the months of 11/2019 and 12/2019, four resource records will be entered to represent these values.

2) Income:

When cryptocurrency is received as income, the monetary valuation of that income will be dependent on the date the coins were received. The coins received as income shall be compared to the historical data of the specific cryptocurrency in the month it was received and shall be multiplied by the low share price for the actual date in which the coins were received. This amount is considered the monetary value of the income. When coins are received as income on different dates within the same month, each transaction shall be valued separately; however, the monetary value of each transaction

shall be combined to determine the total income received for the month. Actual income values shall be budgeted individually for each month in which an actual value can be measured regardless if received as a one-time payment, or if the payments are expected to be received on an ongoing basis. If the payments are expected to be received on an ongoing basis, prospective budgeting is applicable. An average shall be established based on the actual income amounts received in each month prior to the month the prospective budgeting is to begin. These provisions are true for all coins received as income whether it be considered earned, unearned, or self-employment.

For unearned income, a Miscellaneous income record shall be created with an income type of "Other – Countable" for the purpose of counting this income in the eligibility system. For earned income, the earnings income type shall be used. For self-employment, the self-employment income type shall be used.

Using the example above: Evelyn received two (2) coins from Monero through mining – one on 12/03/2019 and the other on 12/15/2019. By researching the historical data of Monero, the worker determines that the coin received on 12/03/2019 is valued at \$53.43. The coin received 12/15/2019 is valued at \$50.12. Though valued individually, these amounts are added together to calculate the total monthly unearned income of cryptocurrency for the month of December to be \$103.55.

3) Uncompensated Transfers:

When a consumer sells, trades, or gifts away cryptocurrency for less than its fair market value, transfer of property provisions may apply if the transfer occurred within the appropriate look-back period. Like with income, when determining the fair market value of cryptocurrency coins when transfer of property provisions apply, the amount of coins disposed of shall be multiplied by the low share price of the actual date the transaction occurred. The difference between that value and the value of compensation received, if any, will determine the uncompensated value of the transfer.

Consider the following examples:

1. On 01/13/2020, Dean gifted five (5) Ethereum coins to his son. Dean did not receive any compensation in exchange for this gift; therefore, the full fair market value of the Ethereum coins will be considered in the transfer of property penalty. Based on the historical data, the worker calculates the value of the Ethereum coins on 01/13/2020 to be \$714.55 total. This amount is used to calculate Dean's penalty period.
2. On 01/01/2020, Connie traded one (1) Bitcoin coin in exchange for fifteen (15) Dash coins. Although Connie received more coins than that which was given, Dash has far less value than Bitcoin; therefore, a potential uncompensated transfer has occurred. The worker researches the historical data for each cryptocurrency based on the low share prices on 01/01/2020 and determines that the Bitcoin coin was valued at \$7,174.94 and the Dash coins were valued in total at \$614.55. This leaves an uncompensated transfer of \$6,560.39. This amount is used to calculate Connie's penalty period.

For questions or concerns related to this document, please contact one of the KDHE Medical Policy Staff listed below.

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